Thunderbird
Archeology

PHASE I ARCHEOLOGICAL INVESTIGATIONS OF THE GLOUCESTER PARKWAY PROPERTY LOUDOUN COUNTY, VIRGINIA

By
Brian Buchanan

May 2006

WSSI #11771.01

Prepared under the supervision of
Christine Jirikowic, Principal Investigator

Prepared for:
Erickson Retirement Communities, L.L.C.
703 Maiden Choice Lane
Catonsville, Maryland 21228

Prepared by:
Thunderbird Archeology
Wetland Studies and Solutions, Inc.
5300 Wellington Branch Drive
Suite 100
Gainesville, Virginia 20155

ABSTRACT

A Phase I archeological survey was conducted on the 11.35 acre Gloucester Parkway property located northwest of the intersection of Smith Switch Road (SR 607) and the Loudoun County Parkway, Loudoun County, Virginia. The work was carried out in June of 2006 by Thunderbird Archeology, a division of Wetland Studies and Solutions, Inc., of Gainesville, Virginia, for Erickson Retirement Communities, L.L.C. of Catonsville, Maryland. No archeological sites were found, and no further archeological work is recommended.

TABLE OF CONTENTS

LIST OF EXHIBITS

LIST OF PLATES

INTRODUCTION

This report presents the results of a Phase I archeological investigation of the 11.35 acre Gloucester Parkway property. The project area is a linear corridor along the alignment of the proposed Gloucester Parkway between Beaverdam Run and the intersection of the Loudoun County Parkway (Route 607) and Smith Switch Road in Loudoun County, Virginia (Exhibit 1). Thunderbird Archeology, a division of Wetland Studies and Solutions, Inc., of Gainesville, Virginia, conducted the study described in this report for Erickson Retirement Communities, L.L.C. of Catonsville, Maryland. The fieldwork was carried out in June of 2006.

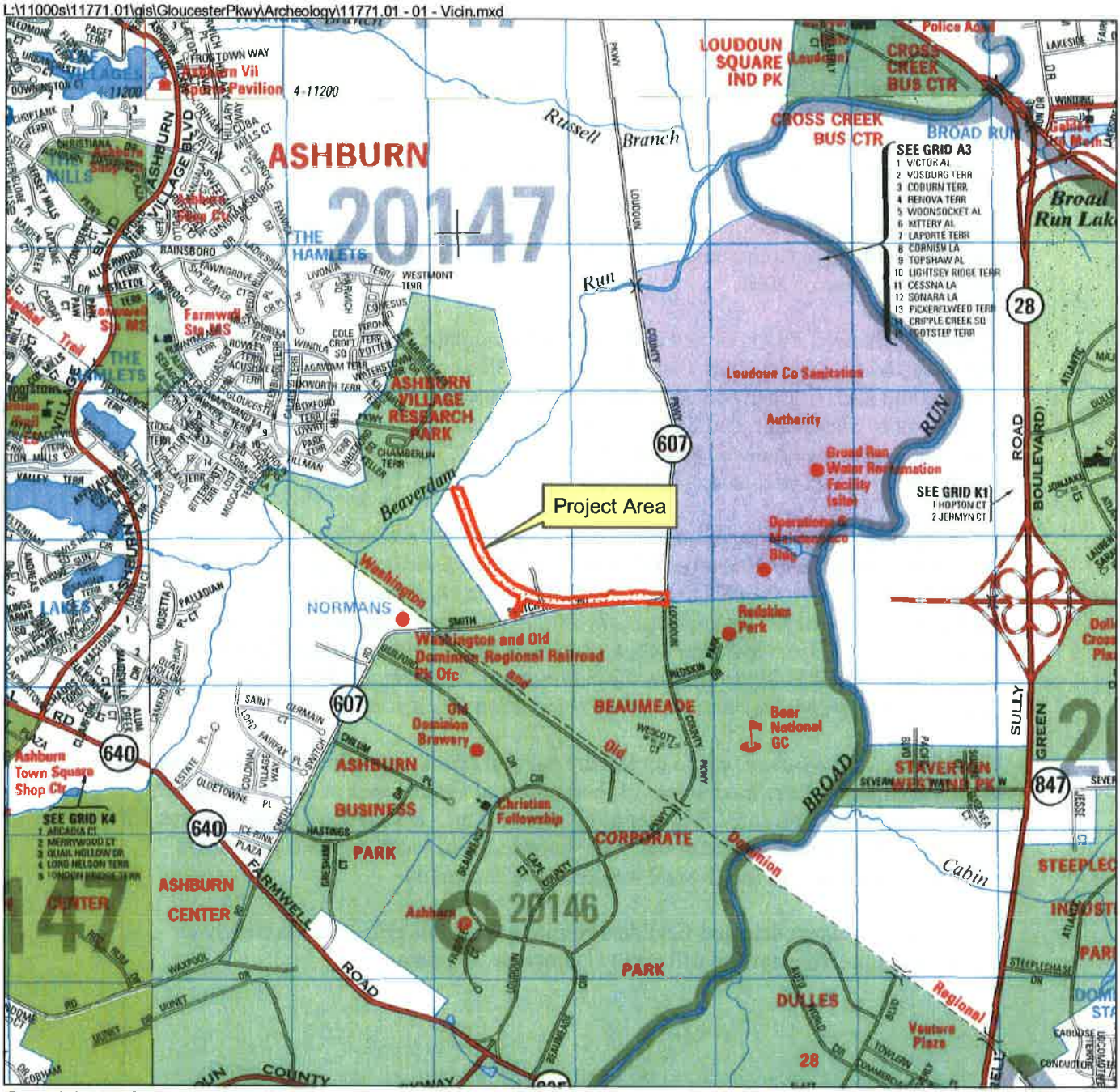
Christine Jirikowic, Ph.D., served as Principal Investigator on this project, and Brian Buchanan, M.A., served as the Field Supervisor. Elizabeth Waters, M.A., Johnna Flahive, and Kirk Norman served as the Field Technicians. Tammy Bryant, M.A., served as Laboratory Supervisor, and Kelsey Woodman, M.A., conducted the artifact analysis. The background material was prepared by Joan Walker, Ph.D. and Johnna Flahive, M.A., and the drafting was prepared by Elizabeth Waters and Kirk Norman.

Fieldwork and report contents conformed to the guidelines set forth by the Virginia Department of Historic Resources (VDHR) for a Phase I reconnaissance level survey as outlined in their 2001 *Guidelines for Conducting Cultural Resource Survey in Virginia, Additional Guidance for the Implementation of the Federal Standards Entitled Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (VDHR 2001) as well as the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (Dickenson 1983).

The purpose of the survey was to locate any cultural resources within the impact area and to provide a preliminary assessment of their potential significance in terms of eligibility for inclusion on the National Register of Historic Places. If a particular resource was felt to possess the potential to contribute to the knowledge of local, regional or national prehistory or history, Phase II work would be recommended.

All artifacts, research data and field data resulting from this project are currently on repository at the Thunderbird offices in Gainesville, Virginia.

L:\11000s\11771.01\gis\GloucesterPkwy\Archeology\11771.01 - 01 - Vicin.mxd



Vicinity Map
Gloucester Parkway
WSSI #11771.01
Scale: 1" = 2000'

Thunderbird Archeology
A Division of Wetland Studies and Solutions, Inc.

Exhibit 1

ENVIRONMENTAL SETTING

Loudoun County encompasses portions of the Piedmont Triassic Lowland and the Inner Piedmont Plateau sub-provinces and a portion of the Blue Ridge Province (Fenneman 1938; Bailey 1999). The Piedmont Physiographic Province is underlain by igneous and metamorphic rocks of various origins that were folded during the Paleozoic as the North American and African plates converged. Later, in the Mesozoic, rifting occurred as Pangea broke apart and the Atlantic Ocean formed. The Piedmont ranges from 200 feet above sea level (a.s.l.) at the Fall Line to circa 1000 feet a.s.l. in the western portion at the Blue Ridge. Because of the intensive weathering of the underlying rocks in the Piedmont's humid climate, bedrock is generally buried under a thick, 6 to 60 foot blanket of saprolite.

The Piedmont Province has been sub-divided into three sub-provinces: the Outer Piedmont Plateau, the Triassic Lowlands, and the Inner Piedmont Plateau. The project area lies within the Inner Piedmont, which, located adjacent to the Blue Ridge Mountains, is an area of rugged terrain where erosion has not yet leveled the metamorphic rocks. Softer materials have been worn away, leaving a discontinuous belt of mountains, erosional remnants called monodnocks. Elevations range from 400 feet to 1000 feet a.s.l., with peaks rising to 1500 to 2000 feet a.s.l.

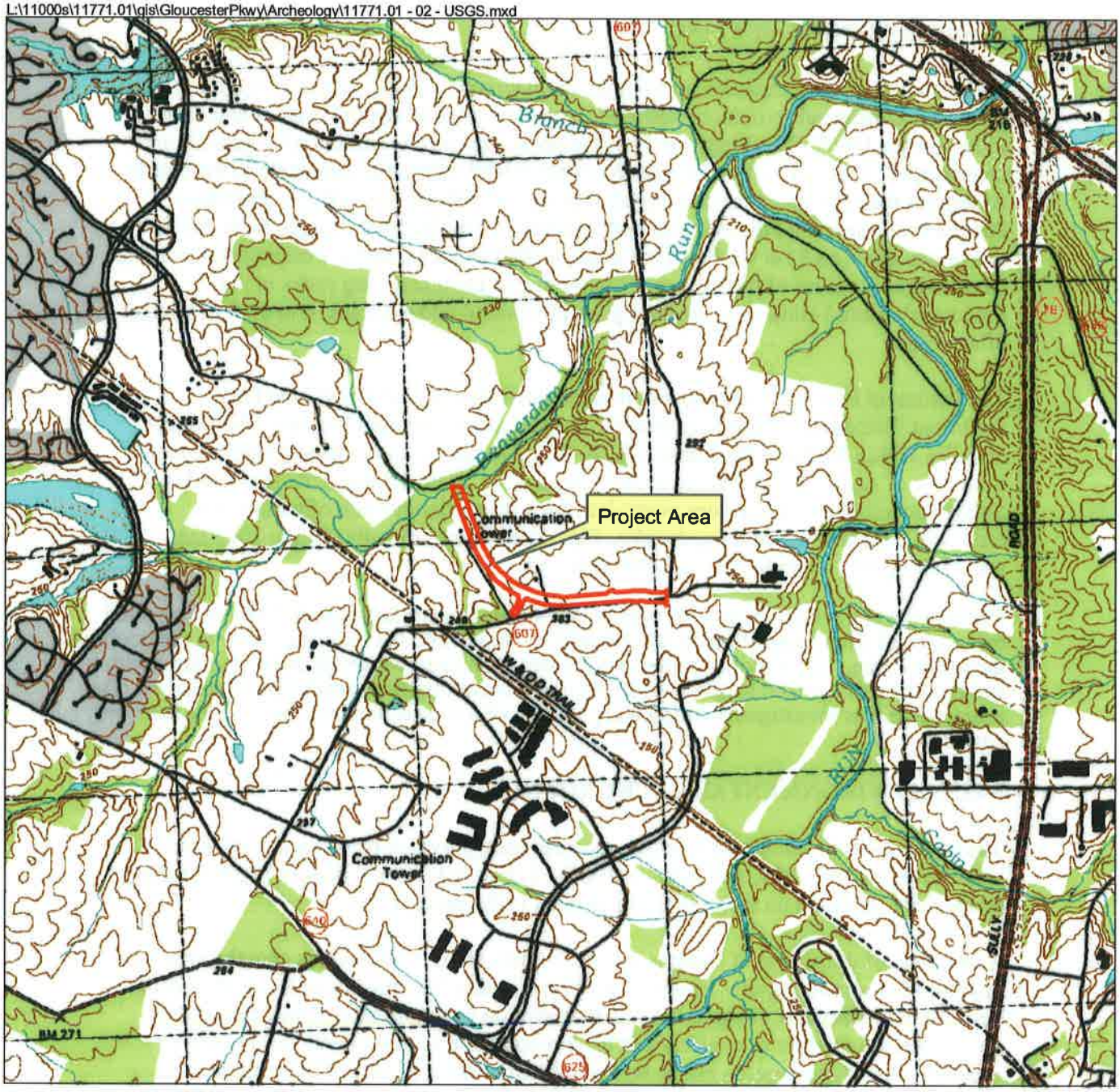
The topography within the project area gently slopes toward Beaverdam Run and unnamed tributaries of Broad Run (Exhibit 2). Broad Run drains into the Potomac River to the north of the project area. The majority of the project area is situated within an active sod farm with a small portion of a mixed hardwood forest lying adjacent to Beaverdam Run (Exhibit 3). The project area was investigated during a dry portion of the early summer, making the soils very compact.

PALEOENVIRONMENTAL BACKGROUND

The basic environmental history of the area has been provided by Carbone (1976; see also Gardner 1985, 1987, and Johnson 1986). The following will present highlights from this history, focusing on those aspects pertinent to the project area.

At the time of the arrival of humans into the region, about 11,000 years ago, the area was beginning to recover rapidly from the effects of the last Wisconsin glacial maximum of circa 18,000 years ago. Vegetation was in transition from northern dominated species and included a mixture of conifers and hardwoods. The primary trend was toward a reduction in the openness so characteristic of the parkland of 14-12,000 years ago. Animals were undergoing a rapid increase in numbers as deer, elk and, probably, moose expanded into the niches and habitats made available as the result of wholesale extinctions of the various kinds of fauna that had occupied the area during the previous millennia. The current cycle of ponding and stream drowning began between 18-16,000 years ago at the beginning of the final retreat of the last Wisconsin glaciation (Gardner 1985); sea level rise has been steady since then.

L:\11000s\11771.01\gis\GloucesterPkwy\Archeology\11771.01 - 02 - USGS.mxd



USGS Quad Map
Sterling, VA-MD 1994
Gloucester Parkway
WSSI #11771.01
Scale: 1" = 2000'

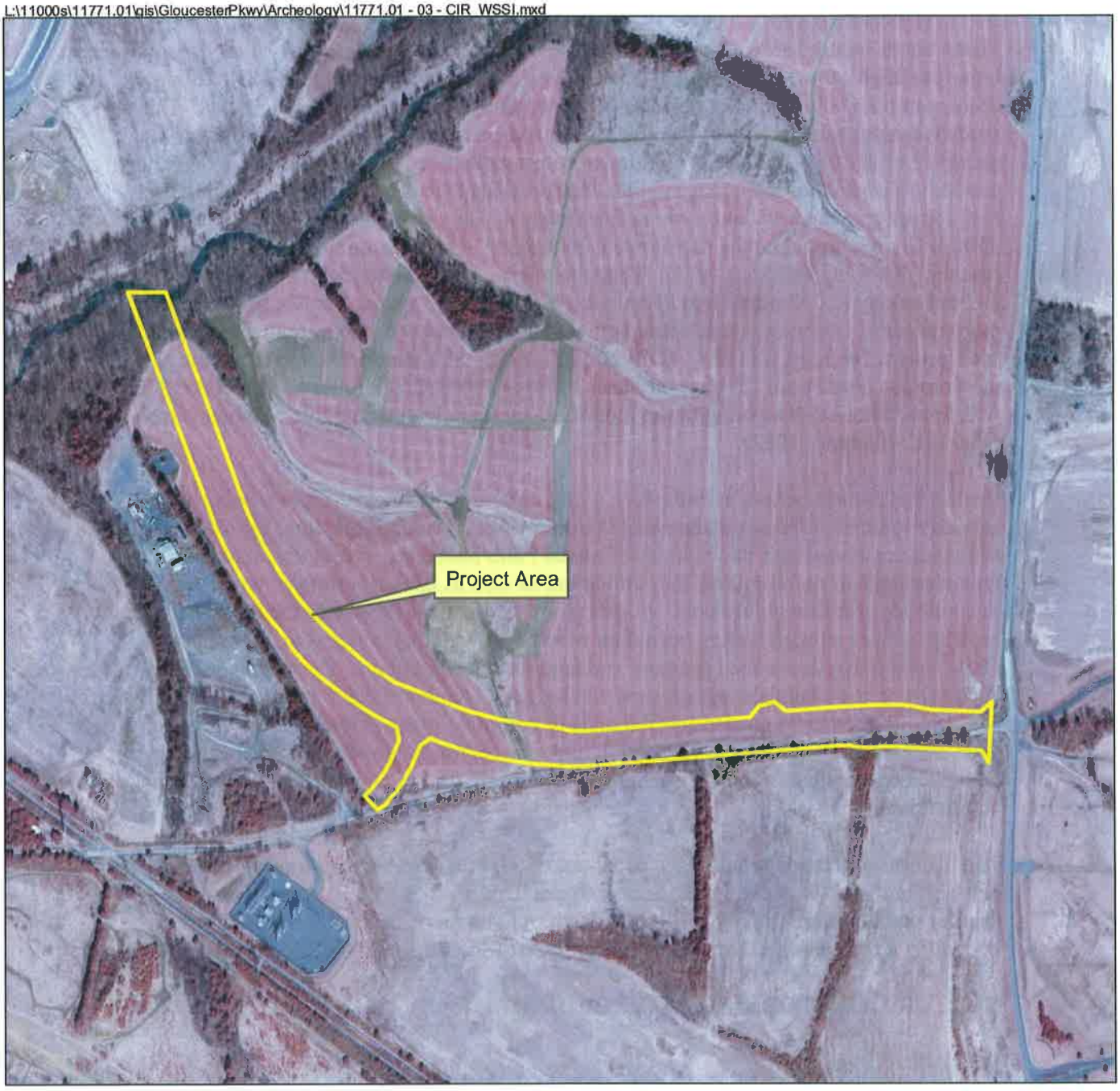
N
W E
S

Latitude: 39°01'47" N
Longitude: 77°27'12" W
Hydrologic Unit Code (HUC): 02070008
Stream Class: III
Name of Watershed: Beaverdam Run and an Unnamed Tributary to Broad Run

Thunderbird Archeology
A Division of Wetland Studies and Solutions, Inc.

Exhibit 2

L:\11000s\11771.01\gis\GloucesterPkwy\Archeology\11771.01 - 03 - CIR_WSSI.mxd



Spring 2004 Color Infrared Imagery
Gloucester Parkway
WSSI #11771.01
Scale: 1" = 500'

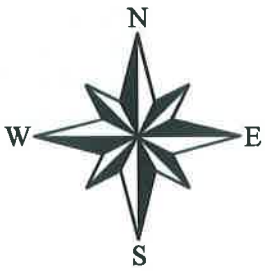


Photo Source: Wetland Studies and Solutions, Inc.

These trends continued to accelerate over the subsequent millennia of the Holocene. One important highlight was the appearance of marked seasonality circa 7000 B.C. This was accompanied by the spread of deciduous forests dominated by oaks and hickories. The modern forest characteristic of the area, the mixed oak-hickory-pine climax forest, prevailed after 3000-2500 B.C. Continued forest closure led to the reduction and greater territorial dispersal of the larger mammalian forms such as deer. Sea level continued to rise, resulting in the inundation of interior streams. This was quite rapid until circa 3000-2500 B.C., at which time the rise slowed, continuing at a rate estimated to be 10 inches a century (Darmody and Foss 1978). This rate of rise continues to the present. Based on the archeology (c.f. Gardner and Rappleye 1979), it would appear that the mid-Atlantic migratory bird flyway was established circa 6500 B.C.; oysters had migrated to at least the Northern Neck by 1200 B.C. (Potter 1982) and to their maximum upriver limits along the Potomac near Popes Creek, Maryland, by circa 750 B.C. (Gardner and McNett 1971), with anadromous fish arriving in the Inner Coastal Plain in considerable numbers circa 1800 B.C. (Gardner 1982).

During the historic period, at circa A.D. 1700, cultural landscape alteration becomes a new environmental factor (Walker and Gardner 1989). Around this time, Euro-American settlement extended into the Piedmont/Coastal Plain interface. With these settlers came land clearing and deforestation for cultivation, as well as the harvesting of wood for use in a number of different products. At this time the streams tributary to the Potomac were broad expanses of open waters from their mouths well up their valleys to, at, or near their "falls" where they leave the Piedmont and enter the Coastal Plain. These streams were conducive to the establishment of ports and harbors, elements necessary to commerce and contact with the outside world and the seats of colonial power. Most of these early ports were eventually abandoned or reduced in importance, for the erosional cycle set up by the land clearing resulted in tons of silt being washed into the streams, ultimately impeding navigation.

The historic vegetation would have consisted of a mixed oak-hickory-pine forest, with oak-chestnut forests on the lower slopes. Associated with this forest were deer and smaller mammals and turkey. After the death of the American chestnuts, the forest is becoming a red oak-chestnut oak-white oak forest (Shelford 1963:40).

CULTURAL HISTORICAL BACKGROUND

Prehistoric Overview

A number of summaries of the archeology of the general area have been written (c.f. Gardner 1987; Johnson 1986; Walker 1981); a brief overview will be presented here. Gardner, Walker and Johnson present essentially the same picture; the major differences lie in the terminology utilized for the prehistoric time periods.

Paleoindian Period (9500-8000 B.C.)

The Late Pleistocene/Early Holocene of the Late Glacial period was characterized by cooler and drier conditions with less marked seasonal variation than is evident today. The cooler conditions resulted in decreased evaporation and, in areas where drainage was topographically or edaphically poor, could have resulted in the development of wetlands in the neighboring Triassic Lowlands (Walker 1981; Johnson 1986:P1-8). The overall cast of the vegetation was one of open forests with mixed coniferous and deciduous elements. The character of local floral communities would have depended on drainage, soils, and elevation, among other factors. The structure of the open environment would have been favorable for deer and, to a lesser degree, elk, which would have expanded rapidly into the environmental niches left available by the extinction and extirpation of the herd animals and megafauna characteristic of the Late Pleistocene. As the evidence suggests now, the last of these creatures, e.g. mastodons, would have been gone from the area circa 11,000-11,500 years B.P., or just before humans first entered what is now Virginia.

Diagnostic artifacts of the earliest groups include Clovis spear points (Early Paleoindian), Mid-Paleo points, and Dalton points (Late Paleoindian). Although hard evidence is lacking, the subsistence settlement base of these groups appears to have focused on general foraging with an emphasis on hunting (Gardner 1989 and various). A strong component of the settlement and exploitative system was the preference for a restricted range of microcrystalline lithics, e.g. jasper and chert, a formal tool kit, and the curation of this tool kit. Based on current knowledge and predictive models, Paleoindian usage of the Piedmont was not intensive away from the major rivers, and most of these sites would have been transient hunting camps.

Early Archaic Period (8500-6500 B.C.)

The warming trend, which began during the terminal Late Pleistocene, continued during the Early Archaic. Precipitation increased and seasonality became more marked, at least by 7000 B.C. The open woodlands of the previous era gave way to increased closure, thereby reducing the edge habitats and decreasing the range and numbers of edge adapted species such as deer. The arboreal vegetation was initially dominated by conifers, but soon gave way to a deciduous domination.

Archeologically, temporally diagnostic artifacts shift from the lanceolate spear points of the Paleoindians to notched forms (Johnson 1986:P2-4). Diagnostic projectile points include Palmer Corner Notched, Amos Corner Notched, Kirk Corner Notched, Kirk Side Notched, Warren Side Notched and Kirk Stemmed. Although the populations still exhibited a preference for the cryptocrystalline raw materials, they began to utilize more locally available materials such as quartz (Walker 1981:32; Johnson 1986:P2-1). The tool kit remained essentially the same as the Paleoindian, but with the addition of such implements as axes.

At the beginning of the Early Archaic the settlement pattern was similar to that of the Paleoindians. Changes in settlement become evident from 7500 B.C. on, accelerating after 7200 B.C. Among the major shifts were a movement away from a reliance on a restricted range of lithics and a shift toward expedience, as opposed to curation, in tool manufacture. Johnson feels that this shift is particularly marked during the change from Palmer/Kirk Corner Notched to Kirk Side Notched/Stemmed (Johnson 1983; 1986:P2-6). The changes are believed to be the result of an increase in deciduous trees and the subsequent closure of the forested areas. These changes are reflected in the fact that sites show up in a number of areas not previously exploited. A population increase also seems to be a factor in this increased number of sites.

Middle Archaic (6500-3000/2500 B.C.)

The Middle Archaic period, which corresponds to the Atlantic environmental episode, exhibited an acceleration of the warming trend (Walker 1981). Two major sub-episodes were present: an earlier, moister period that lasted until approximately 4500 B.C., and a later, warmer and drier period, the mid-Holocene Xerothermic, which ended at approximately 3000 B.C. A gradual reduction in rainfall and increased evaporation characterized the period, which was marked by an increase in deciduous vegetation, a more marked seasonality of plant resources, a decrease in the deer population (because of the disappearance of edge habitats), and an increase in the numbers of other game animals such as turkey. Importantly for the local area, more of a mosaic of forests and grasslands might have been present because of edaphic factors. The dominance of deciduous species offered a high seasonal mast (acorns, nuts) that provided a nutritious and storable food base (Walker 1981).

Diagnostic projectile points include Lecroy, Stanly, Morrow Mountain, Guilford, Halifax and other bifurcate/notched base, contracting stem and side notched variants. The tool kit is definitively more expedient (Walker 1981) and includes grinding and milling stones, chipped and ground stone axes, drills and other wood working tools.

With the increasing diversity in natural resources came a subsistence pattern of seasonal harvests. Base camps were located in high biomass habitats or areas with the greatest variety of food resources nearby (Walker 1981). These base camp locations varied according to the season; however, they were generally located on rivers, fluvial swamps, or interior upland swamps. The size and duration of the base camps appear to have depended on the size, abundance, and diversity of the immediately local and nearby resource zones. In contrast to the earlier preference for cryptocrystalline materials, Middle Archaic populations used a wide variety of lithic raw materials, and propinquity became the most important factor in lithic raw material utilization (Walker 1981 and Johnson 1986). Settlement, however, continued to be controlled, in part, by the distribution of usable lithics.

Early Archaic components show a slight increase in numbers, but it is during the Middle Archaic (Morrow Mountain and later) that prehistoric human presence becomes relatively widespread (Gardner various; Johnson 1986; Weiss-Bromberg 1987). Whereas the

earlier groups appear to be more oriented toward hunting and restricted to a limited range of landscapes, Middle Archaic populations move in and out and across the various habitats on a seasonal basis. Diagnostic artifacts from upland surveys along and near the Potomac show a significant jump during the terminal Middle Archaic (e.g. Halifax) and beginning Late Archaic (Savannah River). Johnson notes a major increase in the number of sites during the bifurcate phase (Johnson 1986:P2-14) and the later phases such as Halifax.

Late Archaic (2500-1000 B.C.)

During this time period, the climatic changes associated with the Sub-Boreal episode continued, although the climate began to ameliorate. At this time, a major adaptive element was found in the resources offered by the rivers and estuaries.

Diagnostic artifacts include broadspear variants such as Savannah River and descendant forms such as the notched broadspears, Perkiomen and Susquehanna, Dry Brook and Orient, and more narrow bladed, stemmed forms such as Holmes. Gardner (1987) separates the Late Archaic into two phases: Late Archaic I (2500-1800 B.C.) and Late Archaic II (1800-1000 B.C.). The Late Archaic I corresponds to the spread and proliferation of Savannah River populations, while the Late Archaic II is defined by Holmes and Susquehanna points. The distribution of these two, Gardner (1982; 1987) suggests, shows the development of stylistic or territorial zones. The Susquehanna style was restricted to the Potomac above the Fall Line and through the Shenandoah Valley, while the Holmes and kindred points were restricted to the Tidewater and south of the Potomac through the Piedmont. Another aspect of the differences between the two groups is in their raw material preferences: Susquehanna and descendant forms such as Dry Brook and, less so, Orient Fishtail, tended to be made from rhyolite, while Holmes spear points were generally made of quartzite.

A new item in the inventory was the stone bowl manufactured of steatite, or soapstone. These were carved from material occurring in a narrow belt extending from Pennsylvania south to Alabama and situated, for the most part, along the edge of the Piedmont and Inner Coastal Plain provinces.

An increasingly sedentary lifestyle evolved, with a reduction in seasonal settlement shifts (Walker 1981; Johnson 1986:P5-1). Food processing and food storage technologies were becoming more efficient, and trade networks began to be established.

The most intense utilization of the region begins circa 1800 B.C. with the advent of the Transitional Period and the Savannah River Broadspear derivatives, which include the Holmes and other related points. In models presented by Gardner, this is linked with the arrival of large numbers of anadromous fish. These sites tend to be concentrated along the shorelines near accessible fishing areas. The adjacent interior and upland zones become rather extensively utilized as adjuncts to these fishing base camps. The pattern of using seasonal camps continues. Although hunting camps and other more specialized sites may occur in the Triassic Lowlands, the larger base camps are expected to be found

along rivers or in estuarine settings (Walker 1981). Use of the interfluvial Piedmont diminished during the Late Archaic. Sites from this period are less frequent and more widely scattered.

Early Woodland (1000-500 B.C.)

At this time during the Sub-Atlantic episode, more stable, milder and moister conditions prevailed, although short term climatic perturbations were present. This was the point at which the climate evolved to its present conditions (Walker 1981).

The major artifact hallmark of the Early Woodland is the appearance of pottery (Dent 1995; Gardner and McNett 1971). The Early Woodland period may be separated into three phases: Early Woodland I, II, and III. The earliest dates for pottery are 1200 B.C. in the Northern Neck (Waselkov 1982) and 950 B.C. at the Monocacy site in the Potomac Piedmont (Gardner and McNett 1971). This pottery is tempered with steatite, and the vessel shape copied that of the soapstone bowl, suggesting a local source for this innovation. This steatite tempered pottery is characteristic of the Early Woodland I period and is widely distributed throughout the Middle Atlantic (Dent 1995; Gardner and Walker 1993). Diagnostic points included smaller side notched and stemmed variants such as Vernon and Calvert. Early Woodland II pottery is characterized by steatite or other heavily tempered ceramics with conoidal bases that were made by the annular ring technique. This ware is referred to as Selden Island Cordmarked. The wide-spread adoption of this pottery type by groups throughout the Middle Atlantic was perhaps due to the fact that sand and grit was such a versatile temper, for groups once far removed from the steatite sources quickly adopted this new medium (Goode 2002:3, 26). Again, small stemmed or notched points are diagnostic artifacts. Sand tempered pottery (Accokeek) is the Early Woodland III descendant of these steatite tempered wares. Rossville/Piscataway points are the diagnostic spear points.

It is important to note that pottery underscores the sedentary nature of these local resident populations. This is not to imply that they did not utilize the inner-riverine or inner-estuarine areas, but rather that this seems to have been done on a seasonal basis by people moving out from established bases. The settlement pattern is essentially a continuation of Late Archaic lifeways with an increasing orientation toward seed harvesting in floodplain locations (Walker 1981). Small group base camps would have been located along Fall Line streams during the spring and early summer in order to take advantage of the anadromous fish runs. Satellite sites such as hunting camps or exploitive foray camps would then have operated out of these base camps.

Middle Woodland (500 B.C.-1000 A.D.)

Diagnostic artifacts from this time period include various grit/crushed rock tempered pottery types including Albemarle and Popes Creek (common in the Coastal Plain) that appeared around 500 B.C. A local variant of the net marked pottery is Culpeper ware, found in the Piedmont's Triassic Basin. Net marking is characteristic of the Middle Woodland I period; however, it is supplanted by fabric impression and cord marking

during the Middle Woodland II (Gardner and Walker 1993:4). Cord marked surfaces also occur on Culpeper ware, a sandstone tempered ceramic occasionally found in the Piedmont (Larry Moore, personal communication 1993). The associated projectile points are unclear, but do include small notched and/or stemmed forms. In general, the period from A.D. 200 to about A.D. 900 sees little population in the Potomac Piedmont.

Late Woodland (1000 A.D. to Contact/depopulation)

In the early part of the Late Woodland, the diagnostic ceramics in the Northern Virginia Piedmont region are crushed rock tempered ceramics for which a variety of names, such as Albemarle, Shepherd, etc., are used. The surfaces of the ceramics are primarily cord marked. Later in the Late Woodland, decoration appears around the mouths of the vessels and collars are added to the rims. In the Potomac Piedmont, circa A.D. 1350-1400, the crushed rock wares are replaced by a limestone tempered and shell tempered ware that spread out of the Shenandoah Valley to at least the mouth of the Monocacy. Below the Fall Line, a crushed rock tempered derivative of the earlier types, known as Potomac Creek ware, is found. Triangular projectile points indicating the use of the bow and arrow are diagnostic as well.

Horticulture was the primary factor affecting Late Woodland settlement choice and the focus was on easily tilled floodplain zones where the larger hamlets and villages were found. This was characteristic of the Piedmont as well as the Coastal Plain to the east and the Shenandoah Valley to the west (Gardner 1982; Kavanaugh 1983). The uplands and other areas were also utilized, for it was here that wild resources would have been gathered. Smaller, non-ceramic sites are found away from the major rivers (Hantman and Klein 1992; Stevens 1988).

Most of the functional categories of sites away from major drainages are small base camps, transient, limited purpose camps, and quarries. Site frequency and size vary according to a number of factors, e.g. proximity to major rivers or streams, distribution of readily available surface water, and the presence of lithic raw material (Gardner 1987). Villages, hamlets, or any of the other more permanent categories of sites are rare to absent in the Piedmont inter-riverine uplands. The pattern of seasonally shifting use of the landscape begins circa 7000 B.C., when seasonal variation in resources first becomes marked. By 1800 B.C., runs of anadromous fish occur and the Indians spent longer periods of time along the Potomac, although not necessarily in the Piedmont where the fish runs could not get above Great Falls (Gardner 1982, 1987). It is possible some horticulture or intensive use of local resources appears sometime after 1000 B.C., for at this time the seasonal movement pattern is reduced somewhat (Gardner 1982). However, even at this time and during the post-A.D. 900 agriculture era, extension of the exploitative arm into the upland and inter-riverine area through hunting, fishing and gathering remained a necessity.

Perhaps after 1400 A.D., with the effects of the Little Ice Age, the resulting increased emphasis on hunting and gathering and either a decreased emphasis on horticulture or the need for additional arable land required a larger territory per group, and population

pressures resulted in a greater occupation of the Outer Piedmont and Fall Line regions (Gardner 1991; Fiedel 1999; Miller and Walker n.d.). The 15th and 16th centuries were a time of population movement and disruption from the Ridge and Valley to the Piedmont and Coastal Plain. There appear to have been shifting socio-economic alliances over competition for resources and places in the exchange networks. A severe drought may have occurred in the 16th century. More centralized forms of social organization may have developed at this time, and small chiefdoms appeared along major rivers at the Fall Line and in the Inner Coastal Plain at about this time. A Fall Line location was especially advantageous for controlling access to critical seasonal resources as well as being points of topographic constriction that facilitated controlling trade arteries (Potter 1993; Jirikowic 1999; Miller and Walker n.d.).

Historic Overview

Early English explorations to the American continent began in 1584 when Sir Walter Raleigh obtained a license from Queen Elizabeth of England to search for "remote heathen lands" in the New World, but all of his efforts to establish a colony failed. In 1606, King James I of England granted to Sir Thomas Gates and others of "The Virginia Company of London" the right to establish two colonies or plantations in the Chesapeake Bay region of North America in order to search ".... For all manner of mines of gold, silver, and copper" (Hening 1823, Vol. I:57-75).

It was in the spring of 1607 that three English ships--the *Susan Constant,* the *Godspeed,* and the *Discovery* -- under the commands of Captains Newport, Gosnole, and John Smith, anchored at Cape Henry in the lower Chesapeake Bay. After receiving a hostile reception from native inhabitants, exploring parties were sent out to sail north of Cape Henry. Following explorations in the lower Chesapeake, an island 60 miles up the James River was selected for settlement (Kelso 1995:6, 7), and the colonists began building a palisaded fort, which came to be called Jamestown. In 1608, Captain Smith surveyed and mapped the Potomac River, locating the various native villages on both sides of the Potomac River. Captain Smith's "Map of Virginia" supplies the first recorded names of the numerous native villages along both sides of the Potomac River. The extensive village network along the Potomac was described as the "trading place of the natives" (Gutheim 1986:22, 23, 28). After 1620, Indian trade with the English settlers on the lower Coastal Plain became increasingly intense. Either in response to the increased trade or to earlier intra Indian hostilities, confederations of former disparate aboriginal groups were formed.

Reaffirmed by an "Ancient Charter" dated May 23, 1609, King James outlined the boundaries of the charter of "The Virginia Company:"

> "...in that part of America called Virginia, from the point of land, called Cape or Point Comfort, all along the sea coast, to the northward two hundred miles, and from the said point of Cape Comfort, all along the sea coast to the southward two hundred miles, and all that space and circuit of land, lying from the sea coast of the precinct aforesaid, up into the land,

> throughout from sea to sea, west and northwest; and also all the islands, lying within one hundred miles, along the coast of both seas..." (Hening 1823, Vol II:88).

In 1611, John Rolfe (who later married Pocahontas in 1614) began experimenting with the planting of "sweet scented" tobacco at his Bermuda Hundred plantation, located at the confluence of the James and Appomattox Rivers. Rolfe's experiments with tobacco altered the economic future of the Virginia colony by establishing tobacco as the primary crop of the colony; this situation lasted until the Revolutionary War (O'Dell 1983:1; Lutz 1954:27). Tobacco was used as a stable medium of exchange, and promissory notes, used as money, were issued for the quantity and quality of tobacco received (Bradshaw 1955:80, 81). Landed Virginia estates, bound to the tobacco economy, became independent, self-sufficient plantations, and few towns of any size were established in Virginia prior to the industrialization in the south following the Civil War.

A number of early English entrepreneurs were trading along the Potomac River in the early 1600s for provisions and furs. By 1621, the numbers of fur trappers had increased to the point that their fur trade activities required regulation. Henry Fleet, among the better known of the early Potomac River traders, was trading in 1625 along the Potomac River as far north as the Falls of the Potomac. He traded with English colonies in New England, settlements in the West Indies; and English merchants across the Atlantic in London (Gutheim 1986:28, 29, 35, 39).

The first Virginia Assembly, convened by Sir (Governor) George Yeardley at James City in June of 1619, increased the number of "corporations" or boroughs in the colony from seven to eleven. In 1623, the first laws were made by the Virginia Assembly establishing the Church of England in the colony. These regulated the colonial settlements in relationship to Church rule, established land rights, provided some directions on tobacco and corn planting, and included other miscellaneous items such as the provision "...That every dwelling house shall be pallizaded in for defence against the Indians" (Hening 1823, Vol I:119-129).

In 1617, four parishes--James City, Charles City, Henrico and Kikotan--were established in the Virginia colony. By 1630, the colony had expanded, necessitating the creation of new shires, or counties, to compensate for the courts, which had become inadequate (Hiden 1980:3, 6). In 1634, that part of Virginia located south of the Rappahannock River was divided into eight shires called James City, Henrico, Charles City, Elizabeth Citty [sic], Warwick River, Warrosquyoake, Charles River, and Accawmack, all to be "...governed as the shires in England" (Hening 1823, Vol I:224). Ten years later, in 1645, Northumberland County was established on the north side of the Rappahannock River "...for the reduceing of the inhabitants of Chickcouan [district] and other parts of the neck of land between Rappahanock River and Potomack River," thus enabling European settlement north of the Rappahannock River and in Northern Virginia (Hening 1823, Vol I:352-353). In 1634, when the Virginia colony was divided by the Virginia House of Burgess into eight shires, there were approximately 4,914 men, women, and children in the colony (Greene 1932:136).

Prior to 1692, most lands in the Virginia Colony were granted by the Governor of the colony under the "head right" system and were issued as Virginia Land Grants. In 1618, a provision of 100 acres of land had been made for "Ancient Planters," or those adventurers and planters who had established themselves as permanent settlers prior to 1618. Thereafter, Virginia Land Grants were issued by the "headright" system by which "any person who paid his own way to Virginia should be assigned 50 acres of land...and if he transported at his own cost one or more persons he should...be awarded 50 acres of land" for each (Nugent 1983:XXIV).

King Charles I was beheaded in January 1648/9 during the mid-17th century Civil Wars in England. His son, Prince Charles II, was crowned King of England by seven loyal supporters, including two Culpeper brothers, during his exile near France in September 1649. For their support, King Charles granted his loyal followers "The Northern Neck," or all that land lying between the Rappahannock and Potomac Rivers in the Virginia colony; the grant was to expire in 1690. King Charles II was subsequently restored to the English throne in 1660.

In 1677, Thomas, Second Lord Culpeper became successor to Governor Berkley in Virginia, and by 1681, he had purchased the six Northern Neck interests of the other proprietors. The Northern Neck grant (due to expire in 1690) was reaffirmed by England in perpetuity to Lord Culpeper in 1688. Lord Culpeper died in 1689, and four-fifths of the Northern Neck interest passed in 1690 to his daughter, Katherine Culpeper, who married Thomas, the fifth Lord Fairfax. The Northern Neck became vested and was affirmed to Thomas, Lord Fairfax, in 1692 (Kilmer and Sweig 1975:5-9). In 1702, Lord Fairfax appointed an agent, Robert Carter of Lancaster County, Virginia, to rent the Northern Neck lands for nominal quit rents, usually two shillings sterling per acre (Hening 1820, Vol IV:514-523; Kilmer and Sweig 1975:1-2, 7, 9).

The extent and boundaries of the Northern Neck were not established until two separate surveys of the Northern Neck were conducted. These were begun in 1736, and a final agreement was reached between 1745 and 1747 (Kilmer and Sweig 1975:13-14).

The oldest known land grants in Loudoun County, dating from the early 1700s, were located in the eastern part of the county on the Potomac River, then the northern part of Stafford County. These were granted to Captain Daniel McCarty and John Pope in 1709. Daniel McCarty's land grant was located on both sides of the mouth of Sugarland Run in the northeastern corner of Loudoun County and was adjoined on the west side by John Pope's land grant located along the south side of the Potomac River waterfront (MacIntyre 1978:21). The southeastern part of Loudoun County consists of a small part of a 41,660 acre tract of land patented in 1724 by the Northern Neck proprietor, Robert "King" Carter of Lancaster County, for his sons and grandsons. Other early patents in eastern Loudoun County were to Hugh Thomlinson (1724), Major John Fitzhugh (1726), and in 1729 to Robert Carter, Jr., Frances and Elizabeth Barnes, and Abraham Barnes (MacIntyre 1978:21; Northern Neck Land Grants A:71-72).

Large parcels of the Northern Neck Land Grants in the eastern portion of Loudoun County were originally obtained by tidewater plantation owners for their growing families of sons. Initially, these tracts were seated by slaves and overseers to establish tobacco plantations that were later settled by the owners' sons and/or descendants. The western part of Loudoun County was initially settled during the second quarter of the 18th century by Germans, Irish, and English Quakers from the northern states. The settlers in this part of the county held smaller tracts of land than those in the eastern portion and had few or no slaves. Approximately 2,200 people lived within what was to become Loudoun County by 1749; the ethnic groups represented included descendants of the English, German and Scotch-Irish settlers and more than 600 slaves (History Matters 2004:11). The slaves included Creoles, those slaves who were born in the British colonies including Virginia) and those who were born in Africa, with western Africa being the most common point of origin (ibid).

Following several county divisions, Loudoun County was created by an Act of the Virginia Assembly from Cameron Parish in the western part of Fairfax County on May 2, 1757 (Hening 1819, Vol. VII:148-149). A survey of the dividing line between the two counties in 1757 began at the head of Difficult Run on the Potomac River and ran southwest to the head of Rocky Run on Bull Run. Parent counties of Loudoun County, derived from the Indian District of "Chickcoun" (Chicacoan) in 1645, were Northumberland County (1645-1651), Lancaster County (1651-1653), Westmoreland County (1653-1664) (Hening 1823, Vol. I:352-353; 381), Stafford County (1664-1732) (Hening 1823, Vol. II:239), Prince William County (1732-1742) (Hening 1820, Vol. IV:803), and Fairfax County (1742-1757) (Hening 1819, Vol. V:207-208). Loudoun County was named for John Campbell, 4th Earl of Loudoun, commander of British Forces in North America during the French and Indian Wars and Governor General of Virginia from 1756-1759 (Head 1908:109-110; Church and Reese 1965:23).

Leesburg, the Loudoun County seat, was established by an Act of the Virginia Assembly in September 1758 on 60 acres of land belonging to Nicholas Minor that adjoined the court house lot. In addition to Nicholas Minor, the property owner and an officer of the Loudoun County militia, Philip Ludwell Lee, Thomas Mason, Francis Lightfoot Lee, James Hamilton, Josiah Clapham, Aeneas Campbell, John Hugh, Francis Hague, and William West, "gentlemen," were appointed trustees for the town of Leesburg (Hening 1819, Vol. VII:235-236).

Although the early economic base of the county was tobacco, by the 1770s a shift from tobacco crops to the cultivation of wheat and the development of flour mills had begun. Factors contributing to this shift to a diversified agricultural base included the exhaustion of tobacco fields and increased English duties on tobacco at a time of drought and crop failures in Virginia. Coincidentally, there was increasing demand for American wheat in England as Britain began entering the industrial age. By the third quarter of the 18th century "...caravans of flour wagons...were already the life of tidewater trade" (Harrison 1987:401-405).

During the Revolutionary War, the majority of the Loudoun County residents were loyal to the Virginia colony. Committees were formed in the county to elect representatives to attend the general meetings in Williamsburg, for the militia draft, and for seeing that the needy families of their soldiers were provided for (Head 1908:127-137). Seven resolutions were passed when the committee met at the courthouse in Leesburg on June 14th "...to consider the most effectual method to preserve the rights and liberties of N. America, and relieve our brethren of Boston." In the seventh resolution passed, Thomas Mason and Francis Peyton were appointed to represent the county at a meeting to be held on August 1, 1774, at Williamsburg, Virginia, to discuss the resolves (Evans 1877/78: 231-236).

British subjects who held land and property in the Virginia colony were deemed to be enemy aliens and their lands and personal property in Virginia, including slaves, were ordered by the Virginia Legislature to be seized as Commonwealth property in 1777 (Hening 1822, Vol X:66-71). Heirs to the Fairfax family holding the Northern Neck were considered enemy aliens and subject to losing their land. "American citizens" in possession of leased Northern Neck lands at the time the Fairfax lands escheated obtained fee simple titles to the property by obtaining a certificate from the Governor of the Commonwealth, completing a Northern Neck Survey of the leased lands and paying a small fee.

Shipments of "State Arms" from Philadelphia for the militia of Loudoun County and the militia of the Northern Neck were kept in storage at Noland's Ferry, on the Potomac River in Loudoun County, by a Mr. Summers, "...an officer Stationed there to receive & Store them..." The Northern Neck militia was composed of men drafted from the counties of Loudoun, Fauquier, and Culpeper (Palmer 1881:223, 257, 308). In July of 1781, a report listing "State Arms" being shipped for the Virginia militia names the following stands of armament:

> "...in a return of the State Arms coming on from Philadelphia, 275 muskets and 104 bayonets are lodged at Fredericksburg, and 841 Muskets and 465 Bayonets at Fauquier Court House. This would make more than the number allowed by 116 -- At Noland's there are 920 muskets and 486 bayonets..." (Palmer 1881:258).

Head (1908:131) states that 1,746 men from Loudoun County were drafted into the Loudoun County militia in 1780 and 1781, contradicting the polls for Loudoun County in 1783 that enumerated 947 white males in the county over the age of 16 (Greene 1932:153), a portion of whom were Friends, or Quakers, who did not bear arms. The 1783 census also records that Loudoun County was the second largest slave holding county in the Commonwealth of Virginia, enumerating a total of 8,704 "blacks," most of whom were slaves, making the county second only to Amelia County, which had a population of 8,747 African-Americans. The 1790 census shows a total of 14,739 "free white males and females," 4,030 slaves, and 183 "other free persons" (Greene 1932:152. 153,155).

In 1787, the United States Constitution was ratified, a significant event for all of the colonists but particularly enslaved African Americans (History Matters 2004:11). Under this constitution, Congress could end the importation of slaves after, but not before, a 20 year period. On January 1, 1808, Congress ended the importation of slaves (ibid).

The Constitution also implemented the "three-fifths" clause which basically determined the method of allotting representatives to the U.S. House of Representatives (History Matters 2003:11). The method used was to count all free persons and three-fifths of the slaves; this prevented the domination of states with large slave populations and fewer free persons by states with large free populations and relatively few numbers of slaves (ibid). The Constitution also prevented Congress from establishing a head tax on slaves, thereby providing a benefit to slave owners.

In 1800, Loudoun County's population was 20,523 persons of which 333 were free persons of color and 4,990 were enslaved; bringing the total African American population to about 25% (History Matters 2004:11). The expansion of western settlements spurred Loudoun's growth in the late 18th and 19th centuries, although some slowing was observed in the 1830s and 1840s (ibid).

Early means of transportation, particularly during the colonial period, depended upon the Potomac River and inland water ways. Two early roads in Loudoun County were the Little River Turnpike (Route 50), chartered by an Act of the Virginia Assembly in 1801 and opened in 1806 from Alexandria as far as the town of Aldie (Edwards et al. 1994:82; Montague 1971:117), and the Leesburg Turnpike (Route 7), incorporated by an Act of the Virginia Assembly in 1809. The Leesburg Turnpike ran from Alexandria to Dranesville in western Fairfax County in 1822 and was finally extended to reach Leesburg in the late 1830s (Poland 1976:115, 117-118).

A study of Loudoun County's geology, indigenous trees and plants, its villages and its agrarian society was published in 1836 by Joseph Martin in his book titled *A New And Comprehensive Gazetteer of Virginia, And The District of Columbia* (Martin 1836: 206-216). In naming the common stones found within the county he notes that: "Small pointed stones of different kinds of flints, and supposed to be Indian darts, are occasionally found" (Martin 1836:208,209). Staple articles of produce in Loudoun County were flour, wheat, pork and beef, and there were a few farm orchards supplying apples, peaches, cherries and plums. In addition to wheat, most of which was milled into flour, grain crops included rye, corn, oats, and buckwheat.

Commenting on the ethnic residents in the county, Martin found:

> "A very considerable contrast is observable in the manners of the inhabitants in different sections of the county. That part of it lying northwest of Waterford was originally settled principally by Germans, and is now called the German settlement, and the middle of the county southwest of Waterford and west of Leesburg, was mostly settled by emigrants from the middle States, many of whom were members of the

> society of Friends. In these two sections the farms are generally from one to three hundred acres each and are mostly cultivated by free labor. In the southern and eastern parts of the county the farms are many of them much larger and principally cultivated by slave labor."

Slave owners in Loudoun County in 1833 paid taxes on 3,021 slaves, the majority of whom were located within the eastern and southern portions of Loudoun County (Martin 1836:210). The 19th century, up until the Civil War, saw significant migration of enslaved African Americans out of the county because of Loudoun County's domestic slave trade (History Matters 2004:12). Over 1,000 slaves were sold out of Loudoun County between 1800 and 1810, and approximately 1,300 slaves were sold out of the county between 1850 and 1860 (ibid). Ninety per cent of the slaves worked in the field, cultivating and harvesting crops as well as establishing and maintaining all of the plantation lands (ibid:12-13).

Early in the antebellum period, free persons of color had formed communities within the towns of Leesburg, Middleburg, Hamilton, Snickersville/Bluemont, Waterford, Lovettsville and Hillsboro (History Matters 2004:13). However, hostility towards all African Americans accelerated in the wake of the Nat Turner rebellion, and in 1831, Virginia passed a number of laws restricting the rights of free African Americans. These included barring African Americans from owning weapons, restriction of business, restriction of free movement and prohibiting them from learning to read or attend school (ibid).

In the mid-1830s, the major towns of Loudoun County with populations of over 100 were: Hillsborough, on the public road from Harpers Ferry to Leesburg, with a population of 172; Leesburg, the county seat, with 500 dwellings and a population of 1,700; Middleburg, on Goose Creek and surrounded by 18 flour mills, with a population of 430; Upperville, in the southwestern part of Loudoun County near the Fauquier County Line, with a population of 300; and Waterford, a settlement in the northern part of the county, with a population of about 400. Other small settlements currently still in existence are: Aldie, at the junction of Snicker's Gap Turnpike and Little River Turnpike; Arcola, on the main stage road from Alexandria to Winchester; and Lovettsville, a German neighborhood about seven miles south of Harpers Ferry. The town of Purcellville was the site of Purcell's Store and was listed as a post office (Martin 1836:215, 216). Approximately 16 small villages and post offices located throughout Loudoun County and at the ferry crossings in 1835/36 are no longer in existence (Martin 1836:210-216).

Between 1830 and 1840, Loudoun County experienced a decline in its population, dropping from 21,939 individuals in 1830 to 20,431 in 1840, or 6.9% (Deck and Heaton 1926:62; Head 1908:85). This population fluctuation appeared again later in the 1800's as well and reflects a phenomena typical of agricultural areas in which partial or total crop failure leads to an out-migration of portions of the population to large cities or other parts of the country (Head 1908:86)

Edge notes on Taylor's 1853 map state that there were 77 water powered mills in the county at that time, including merchant mills, grist mills, and saw mills. The most notable was Carter's Mill on Goose Creek and N. Walker's Mill at Waterford. Taylor's 1853 map does not show any structures within the project area. One structure, attributed to D.G. Smith is located north of the project area (Exhibit 4).

A canal route from the mouth of Goose Creek on the Potomac River to the branches of Little River and Beaver Dam was surveyed in 1832 (Little River Navigation Company 1832). A second canal proposal to build lock and dam navigation for canal boats along Goose Creek was chartered by an Act of the Virginia Assembly in 1832, and a survey was carried out for the canal route in the same year. The purpose of the canal was to open navigation for 20 miles down Goose Creek from the Potomac River to the Snickers Gap Turnpike and to establish a five mile long canal up Little River to the town of Aldie.

Enough stocks in the Goose Creek and Little River Navigation Company, at $50.00 a share, were sold by 1839 to hold a stockholder's meeting. A contract was let in 1840 to James Roach of Alexandria for the first 12 miles of the canal. A financial statement of the Goose Creek and Little River Navigation Company for the year ending September 30, 1852, shows that 784 shares had been subscribed by individuals ($39,200.00) and 1,176 shares by the State of Virginia ($58,800.00). Expenses and disbursements from 1849 to 1852 totaled $75,552.46.

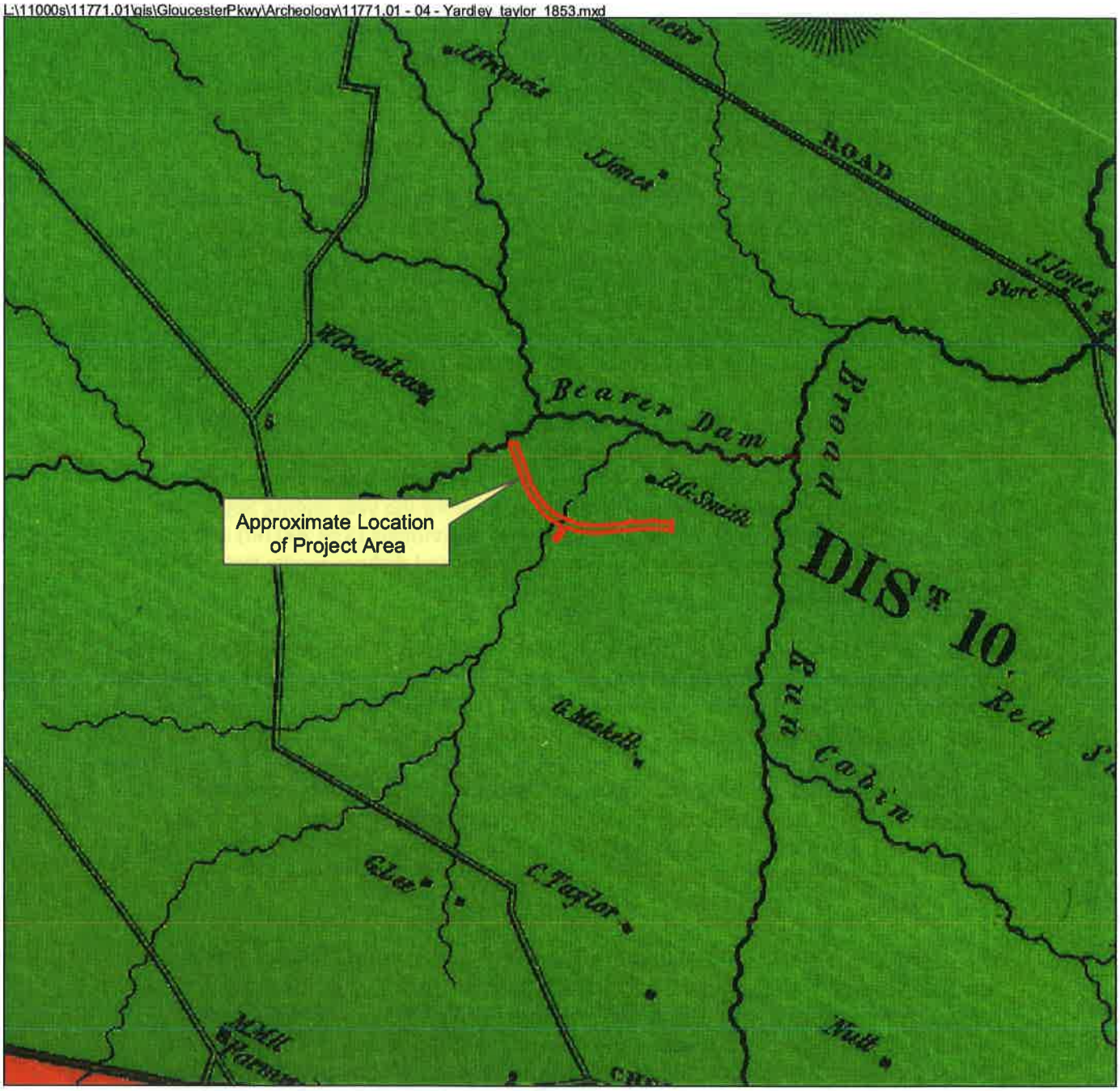
By the end of 1851, Goose Creek was open for the first seven miles, running through two canals, two guard gates, four dams and six locks. The canal was completed in 1854 to the mouth of Little River through a series of 99 locks (Trout 1967:31). The Goose Creek Canal survey shows eight mill sites operating at that time along Goose Creek.

The primary cause of the failure of the Goose Creek and Little River Navigation Company has been attributed to the industrial age advance into railroad systems. By 1854, the Company was financially broken, showing a balance of $1.95 on the account books. The company was dissolved in 1857 (Library of Virginia 1839-1857; Trout 1967:31-34).

The Alexandria, Loudoun and Hampshire Railroad, the first railroad system through Loudoun County, was chartered in circa 1853 (Salmon 1996:15, 47). Construction on the railroad line began in Alexandria in 1857 and reached Leesburg in 1860 (Geddes 1967:27). The Alexandria, Loudoun and Hampshire Railroad was renamed the Washington and Ohio Railroad circa 1873 and became the Washington, Ohio and Western Railroad in 1884 (Commonwealth of Virginia 1873:105; 1877:39; 1884:491).

The pre-Civil War population of Loudoun County was enumerated in 1860 at a total of 21,774 persons, including 5,501 slaves and 1,252 "free colored" persons. Slaves were owned at that time by 670 slave holders (Head 1908:85), indicating an average of eight slaves per household.

L:\11000s\11771.01\gis\GloucesterPkwy\Archeology\11771.01 - 04 - Yardley_taylor_1853.mxd



1853 Yardley Taylor Map
Loudoun County, VA
Gloucester Parkway
WSSI #11771.01
Scale: 1" = ½ mile

N
W E
S

Map Source: "Map of Loudoun County, Virginia from actual surveys by Yardley Taylor, 1853". Original Scale: 1" = 1 mile

Thunderbird Archeology
A Division of Wetland Studies and Solutions, Inc.

Exhibit 4

On the night of December 26, 1860, Major Robert Anderson moved his troops from Fort Moultrie to Fort Sumter in the harbor of Charleston, South Carolina. Subsequently, on April 15, 1861, President Lincoln sent a reinforcement fleet of war vessels from New York to Fort Sumter to suppress the rebellion in the southern states. Two days later, the Commonwealth of Virginia seceded from the Union, adopting the Virginia Ordinance of Secession on April 17, 1861, and forming a provisional Confederate government (Gallagher 1989:29; Boatner 1991:729; Church and Reese 1965:134). The State formally seceded from the Union on May 23, 1861, by a vote of 97,000 to 32,000 (Bowman 1985:51, 55), with Loudoun County voting 1,626 to 726 to ratify the Ordinance of Secession (Hillsboro Bicentennial Committee 1976:21).

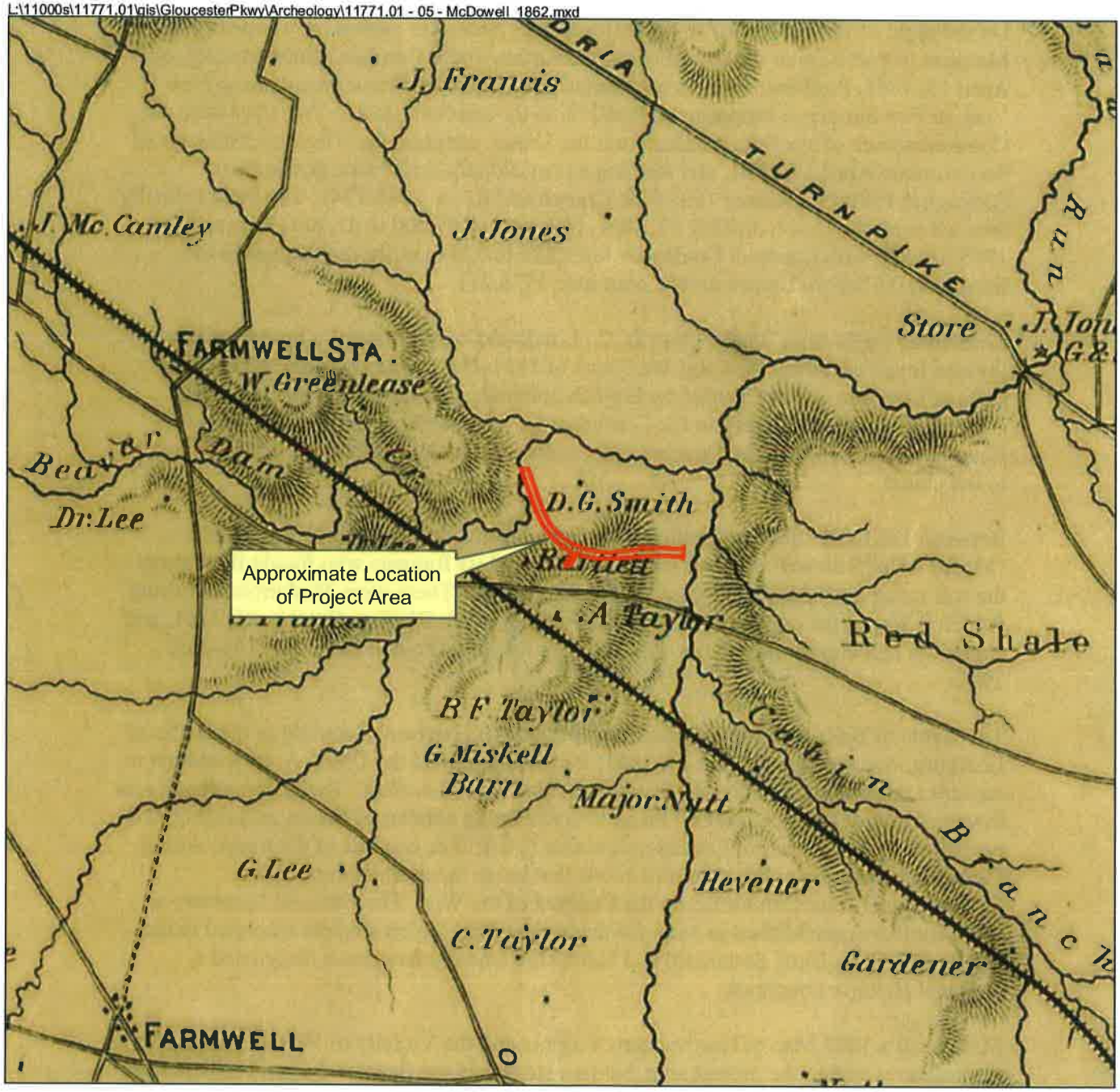
Located 25 miles from Washington, D. C., Loudoun County became a border county of divided loyalties during the Civil War years of 1861-1865. The southern and eastern parts of Loudoun County, settled by English colonials who farmed using slave labor, were loyal, for the most part, to the Confederacy. The northern and western parts of Loudoun County, settled by Quakers and Germans, although a minority, remained loyal to the Union.

Between 1863 and 1865, the southeastern part of Loudoun County was known as "Mosby's Confederacy" and was controlled by Mosby's Rangers who fought throughout the war using unconventional guerrilla warfare tactics. There were 46 skirmishes during the Civil War in the county, including the Battle of Ball's Bluff on October 21, 1861, and excluding less known skirmishes with Mosby's Rangers (Poland 1976:183, 191-192, 209).

The Battle of Balls Bluff, also known as the Battle of Harrison's Landing or the Battle of Leesburg, occurred on October 21, 1861; it centered around the Union Army's attempt to capture Leesburg by crossing the Potomac at Harrison's Landing. The Union attempt was thwarted by Confederate forces with an overwhelming number of Union casualties (921) compared to the number of Confederate losses (149). The conduct of the troops during the battle had strong political ramifications that led to the establishment of the Congressional Joint Committee on the Conduct of the War. The National Cemetery at Balls Bluff was established in 1865 for the burial of the Union soldiers who died in the battle. The Balls Bluff Battlefield and National Cemetery have been designated a National Historic Landmark.

McDowell's 1862 Map of Northeastern Virginia and the Vicinity of Washington shows no structures within the project area, but two structures are shown adjacent to the project area. D.G. Smith's dwelling is located to the north of the project area, while a dwelling attributed to Bartlett is located to the southwest of the property on McDowell's map. A railroad is shown directly south of the project area on McDowell's map. This railway was known as the Alexandria and Harper's Ferry Railroad, and it saw much use and disruption during the Civil War (Exhibit 5).

L:\11000s\11771.01\gis\GloucesterPkwy\Archeology\11771.01 - 05 - McDowell 1862.mxd



1862 McDowell Map
Northeast Virginia and Vicinity of Washington D.C.
Gloucester Parkway
WSSI #11771.01
Scale: 1" = ½ mile

N
W E
S

Map Source: Map of N. Eastern Virginia and Vicinity of Washington. Compiled by General Irvin Mc Dowell, January 1862. United States. Corps of Topographical Engineers". Original Scale: 1" = 1 mile.

In 1863, Abraham Lincoln issued the Emancipation Proclamation, which stated that all enslaved persons in Confederate territory were to be free, and in 1865, Congress passed the 13th Amendment which banned slavery (History Matters 2004:15). However, with the abolition of slavery, Loudoun County saw a drop in the African American population from 6,753 in 1860 to 5,691 in 1870 (ibid).

Federal troops were stationed throughout Virginia, including Loudoun County, during the Reconstruction period, and in 1866, the 14th Amendment to the U.S. Constitution was passed, guaranteeing due process and equal protection under the law to all citizens and granting citizenship to African Americans (History Matters 2004:15). By 1869 the 15th Amendment was passed, giving African American men the right to vote, and the same year Virginia became the only former Confederate state to do this (ibid).

The Underwood Convention held in Richmond from December 1867 through April 1868 led to the new Virginia Constitution of 1869. The Virginia Constitution, ratified on July 6, 1868, provided for the division of each county into townships (later magisterial districts) and for the development of a revolutionary educational system. In 1871-1872 the Virginia state *Public Free School* system was adopted. At this time, there were 46 white schools and nine African American schools in the county (History Matters 2004:36). Many of the African American schools were built because of the efforts of the local African American communities who petitioned and acquired the land, money and labor for their construction (ibid).

The Virginia Constitution also disenfranchised all southerners who had served in a civil capacity or in the military, and required an oath by anyone seeking public office (Church and Reese 1965:134; Woods 1901:24, 25, 119). In 1874 Loudoun County was divided into six magisterial districts: Broad Run, Jefferson, Leesburg, Lovettsville, Mercer, and the Mount Gilead District.

The Alexandria, Loudoun and Hampshire Railroad, reorganized as the Washington and Ohio Railroad in 1864, went into receivership and was reorganized after the war as the Washington and Western Railroad (Geddes 1967:27).

Agricultural recovery during the period of Reconstruction was supplemented by the repair and upkeep of roads and bridges. The Leesburg and Aldie Turnpike (Little River Turnpike or Route 50) was reported to the Virginia Assembly in March of 1873 to be "well graded." The company was authorized at that time to apply capital stock to the "metaling" of the road and to change the route of the turnpike to "south of the Goose Creek Bridge" (Commonwealth of Virginia 1873:249). On April 1, 1873, the Leesburg and Goose Creek Bridge Company was incorporated and authorized to erect toll bridges over Goose Creek from its mouth at the Potomac River to Ball's Mill. The company was also authorized to charge the following tolls: for each horse, mare, mule, gelding, jack, or jenny the toll was 3 cents; for each vehicle drawn by one animal, 10 cents; for each animal exceeding one, 3 cents; for each head of sheep, swine or goats, 1/4 cent; and for each head of neat cattle, 1/2 cent (Commonwealth of Virginia 1873:328-329).

Having lost most of the grist mills, mill dams, railroads, and bridges throughout the county, as well as farm buildings and houses, livestock, fences and crops during the Civil War years, Loudoun County planters were left with land but no laborers, money, farm animals, or farming tools. Loudoun County agriculture had a successful recovery during post-war reconstruction and was listed in the 1880 U. S. Census as the leading county in Virginia in the "...production of corn, butter, eggs, wool, numbers of milch cows and sheep, and second only to Fauquier County in the number of stock cattle" (Head 1908:88). The Loudoun County Live Stock Exhibition Association, incorporated on March 7, 1884, was formed for the "...purpose of holding annual exhibitions of live stock, racing, and other entertainment's" (Commonwealth of Virginia 1884:409-410).

The first telephone system in Loudoun County was introduced by the Loudoun County Telephone Company, incorporated on February 5, 1886. During the spring of 1887, additional telephone lines connected the major towns in Loudoun County. Three of the telephone companies authorized to extend lines between towns in Loudoun County were the North Loudoun Telephone Company, incorporated with a principal office at Hillsboro; the Arcola and Aldie Telephone Company, authorized on April 28, 1887, to erect and maintain telephone lines and offices in the counties of Loudoun and Fairfax; and the Aldie and Leesburg Telephone Company, incorporated on May 12, 1887 (Commonwealth of Virginia 1886:62-63; 1887:31, 109, 280).

The 1900 U.S. Population census showed a small population growth of less than 200 persons in Loudoun County from 21,774 in 1860 to 21,948 in 1900. By ethnic group, the 1900 census showed 16,079 whites, 5,869 blacks, and 101 foreigners. By ethnic comparison, there was a population increase of 1,058 whites between 1860 and 1900, and a decrease of 84 African-Americans during this period (Head 1908: 84, 85).

Although the 15th Amendment to the U.S. Constitution had guaranteed the right of African American men to vote and the Virginia State Constitution of 1869 had affirmed this same right, in 1902, African Americans lost these rights (History Matters 2004:15). In Loudoun County, African Americans made up approximately 10% of the population at this time. The Virginia Constitution of 1902 limited the right to vote to war veterans, their sons; and to property owners who paid at least one dollar in property taxes or who could reasonably explain part of the new constitution (ibid:15-16). The new constitution also required potential voters to complete registration applications in their own handwriting and answer any and all questions from local registrars about their voting qualifications and it imposed a poll tax on voters (ibid:16). As a result, men who could not pay the poll tax, men who were illiterate and men who could not "correctly" answer the local registrar's questions, could not vote. By these measures, by 1904, Virginia's voters were cut in half and African American voters were reduced from around 147,000 to less than 10,000 (ibid). This would not change until the 1960s.

Having recovered from the Civil War by 1900, Loudoun County had become the leading dairy county of Virginia. At the turn of the century, Loudoun County farmers were using agricultural farming methods and equipment that had been developed prior to the Civil War; this continued until the advent of World War I. General impacts on the agricultural

community following the War were the introduction of powered machinery and an increase in prices of farm products and cattle; these were offset by rising taxes and expenses. By the early 1920s, 81% of farmlands within the county were improved; major agricultural products were corn, wheat, dairy products, and the shipping of beef and pork (Deck and Heaton 1926:106).

Land ownership and a focus on agriculture by former African American slaves in Virginia grew rapidly in the late 19th and early 20th century (History Matters 2004:44). Between 1870 and 1910, African American farm ownership increased 3,641% from 860 to 32,168 farm owners. This rise is felt by historians to derive from a number of factors including a tradition of African American proprietorship in the state, greater opportunities for mortgage money, the establishment of a variety of race based mutual aid societies, the promotion of enterprise and self sufficiency by institutions such as Virginia's Hampton Institute and the efforts of prominent African American Virginians (ibid).

Although land ownership grew, the African Americans in Virginia and in Loudoun County felt disenfranchised after the passage of the 1902 Virginia Constitution. This precipitated the formation of social, religious and economic support groups that would assuage the bitterness of segregation and disenfranchisement. It also accelerated a fight for civil rights which would not end for over 50 years. In 1883, a number of individuals from African American communities within Loudoun County petitioned for the right to serve as jurors in the county courts (History Matters 2004:16). In 1890, the Loudoun County Emancipation Association was formed in Hamilton. The association was formed to work for the "betterment of the race – educationally, morally and materially." Emancipation Day was celebrated yearly on September 2 (ibid). In 1910, the association moved to Purcellville where it purchased 10 acres of land on which Emancipation Day activities were held. Other organizations formed during this period were the Odd Fellows, the Willing Workers Club and the Society of Galilean Fisherman.

In 1920, Loudoun County was described as a rural county with 10 incorporated towns, but having no towns with a population of 2,500 or more.

> "According to the Census for 1920 Loudoun County...ranked first in the percentage of Farm land improved; 2nd in the per Capita value of live stock... 3rd in the per capita county wealth ; 4th in total value of all farm property ...and 9th in total value of all crops. Loudoun's rank in these items seems to be particularly good when we consider that the county ranks 19th in size....New developments in agriculture have been widespread in Loudoun in recent years. It has become the rule for farm boys to receive a college education. These men have been instrumental in the installing of improved farm machinery throughout the county. Our farmers have taken a real interest in the raising of pure bred stock. The breeders of horses and cattle have been foremost in this movement..." (Deck and Heaton 1926:106).

The 1920 census shows 15,654 native whites, 4,810 African-Americans, and 111 "foreign-born" persons residing in the county. This shows a population decrease of 7.4% over a period of twenty years (Deck and Heaton 1926:62, 63).

The 1925 Post Office Rural Delivery Map shows dramatic changes in the vicinity of the project area (Exhibit 6). The town of Ashburn appears to the northwest of the property on this map. While no structures are located within the project area, a number of dwellings are located in the vicinity of the project area, with two dwellings lying directly to the north of the project boundaries. Two roads are seen in the Post Office Map to the south and east of the property area. These roads are located in the location of the present day Loudoun County Parkway and Smith Switch Road.

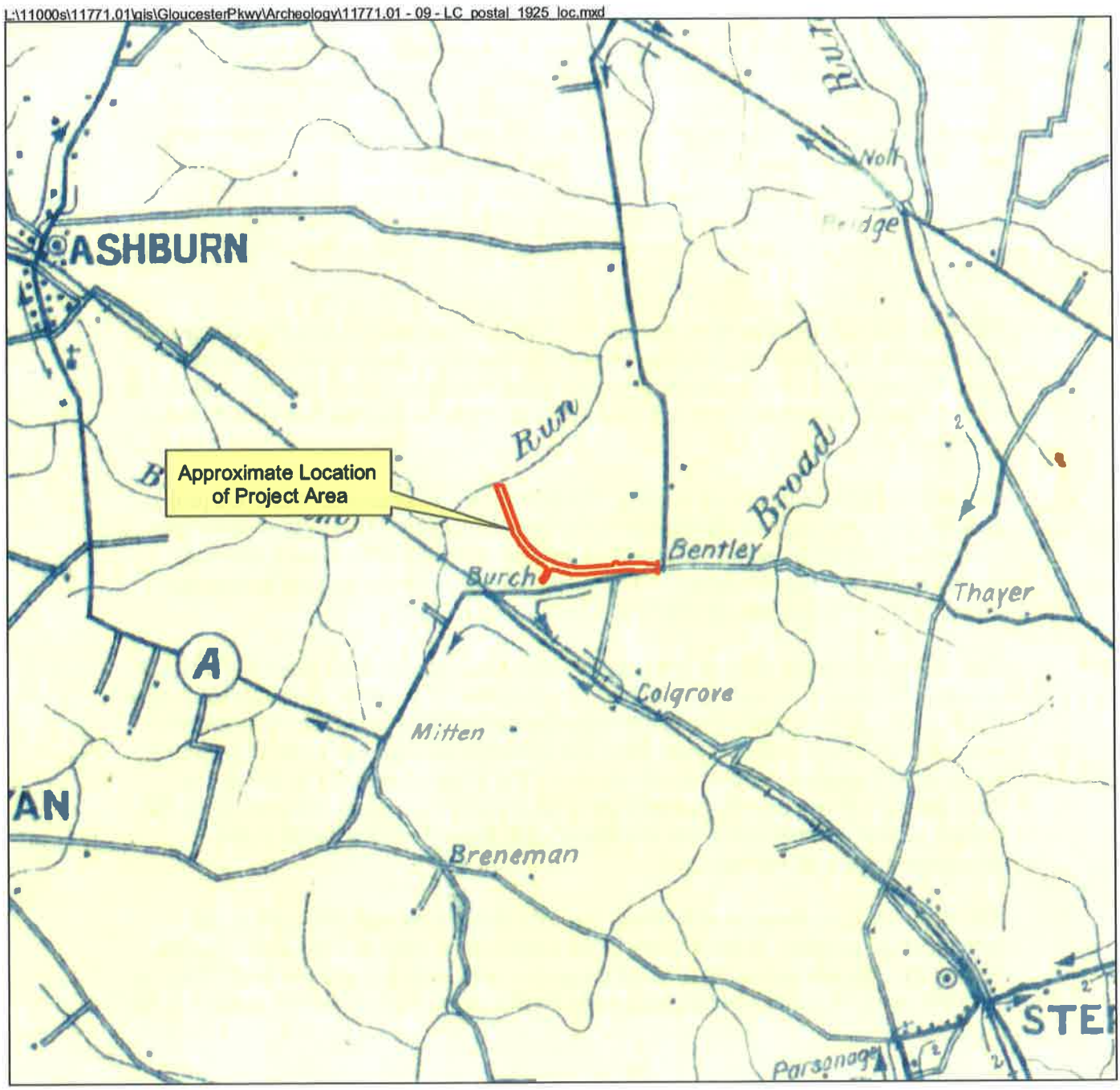
The crash of the stock market in 1929 leading to the Great Depression of the 1930s, the extreme drought of 1930, and the subsequent government requests that cultivated acres be reduced 30%, saw hundreds of properties within the county being sold for delinquent real estate taxes in 1931 and 1932. The major relief during the depression years was the creation of the Rural Electrification Administration (R.E.A.) in 1935, which revolutionized rural life by introducing electricity and indoor plumbing (Poland 1976:279, 317, 319, 326, 327, 334).

Although slowed by the Depression, Loudoun County's African American communities continued to grow (History Matters 2004:46). A number of commercial enterprises owned and operated by African Americans grew into significant local institutions during this period.

Post-depression years saw Loudoun's farm production and income soaring during World War II (Poland 1976:337). Poland comments:

> "As the war demanded additional farm products and the labor shortage became critical, farmers were forced to use more modern farm equipment...During the later years of the war, attempts were made to alleviate labor shortages...by the use of Nazi prisoners of war. Approximately 170 German soldiers, held under U. S. Army guard in a camp near Leesburg, were taken from there by trucks to work on county farms" (Poland 1976:336).

In the early 1940s, efforts by African Americans succeeded in obtaining better public education and improved public facilities for African American children (History Matters 2004:53). One of the major achievements of this group was the construction in 1941 of the Douglass High School in Leesburg, the first high school for African Americans in the county (ibid:53-54). Two additional schools, the 1946 Carver School in Purcellville and the 1948 Banneker School in St. Louis followed (ibid:54). Ultimately the schools were integrated.



1925 United States Post Office Rural Delivery Routes Map
Loudoun County, VA
Gloucester Parkway
WSSI #11771.01
Scale: 1" = ½ mile

N
W E
S

Map Source: "Rural Delivery Routes - Loudoun County, Virginia. Post Office Department, Division of Topography, 1925." Library of Congress Geography and Map Division Washington D.C. Original Scale: 1" = 1 mile.

By the time of World War II in Europe, despite shortages in labor and farm equipment, Loudoun County's farm production and income had grown. The subsequent postwar years of mechanization saw more specialized farming with dairying, poultry and beef cattle leading the list of major agricultural pursuits; commuting increased significantly as well. By 1960, Loudoun County's life style was becoming increasingly urban (Poland 1976:336-337, 341, 342), a trend that continues into current times. By 1970 new suburbanites sought housing in planned communities in the major incorporated towns in Loudoun County and commuted into the Washington, D.C., area to work (ibid:341, 342, 365).

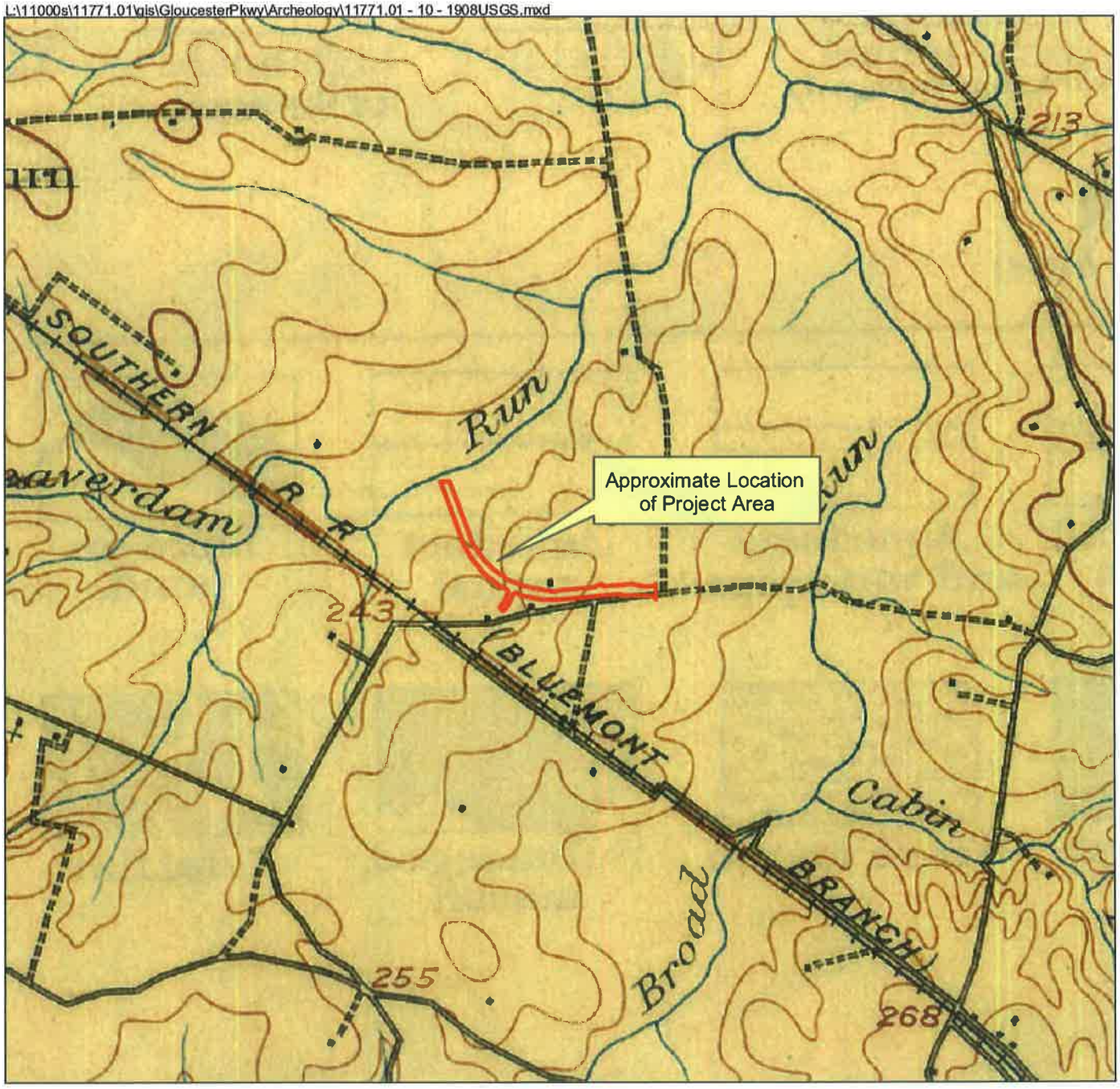
The 1908 U.S.G.S quadrangle of Seneca, VA-Md shows no structures within the project area (Exhibit 7). Three dwellings are shown adjacent to the property area along two roads that are located in the current positions of the Loudoun County Parkway and Smith Switch Road. The railroad seen in McDowell's map was labeled the Southern Railroad in 1908.

The 1952 USGS quadrangle of Sterling, VA-MD shows no structures within the project area, but five dwellings are shown adjacent to the project area. Two of these dwellings, located north of the property, are access by an unimproved road that cuts across the project area boundaries (Exhibit 8). The railroad south of the project area is once again known as the Washington and Old Dominion railroad by 1952.

The 1968 USGS quadrangle of Sterling, VA-MD demonstrates that a variety of changes occurred between 1952 and 1968 (Exhibit 9). Only two of the three structures southwest of the property on the 1952 quadrangle were still extant in 1968. An unimproved drive was constructed sometime between 1952 and 1968 that runs parallel to the project area and leads to a structure labeled *Radio Facility*. The Washington and Old Dominion Railroad is shown on the 1968 quadrangle as an abandoned railroad. Operations on the railway ceased in 1968, and it was abandoned until the early 1980s, when it was transformed into a scenic bike trail.

The 1994 USGS quadrangle of Sterling, VA-MD shows a dramatic increase in the amount of development in the vicinity of the project area between 1968 and 1994 (see Exhibit 2). The railroad to the south of the project area is shown as the W&OD Trail on the 1994 quad. A number of businesses and dwellings are also seen in the vicinity of the property.

L:\11000s\11771.01\gis\GloucesterPkwy\Archeology\11771.01 - 10 - 1908USGS.mxd



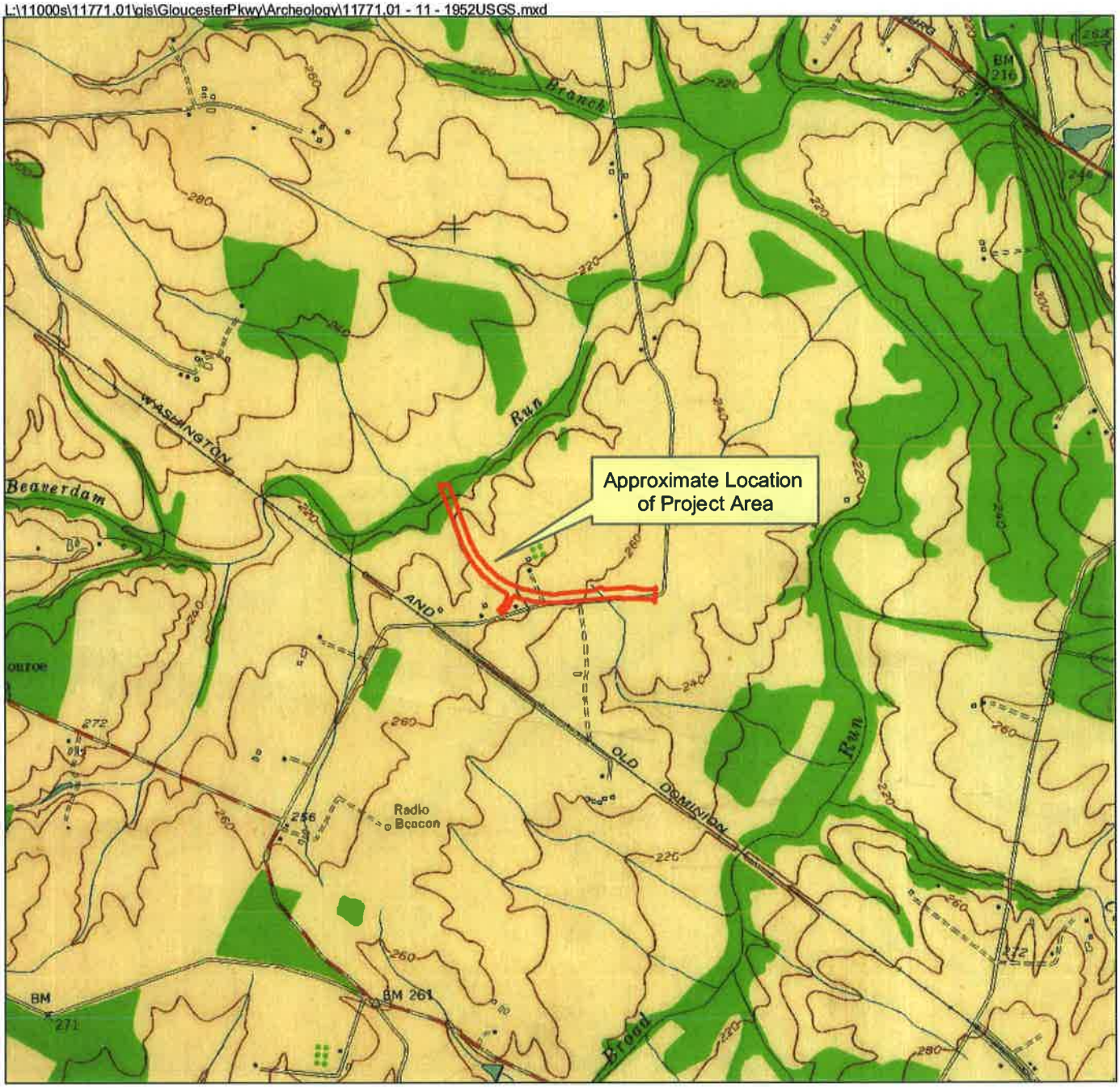
USGS Quad Map
Seneca, VA-MD 1908
Gloucester Parkway
WSSI #11771.01
Scale: 1" = 2000'

N
W E
S

Thunderbird Archeology
A Division of Wetland Studies and Solutions, Inc.

Exhibit 7

L:\11000s\11771.01\gis\GloucesterPkwy\Archeology\11771.01 - 11 - 1952USGS.mxd



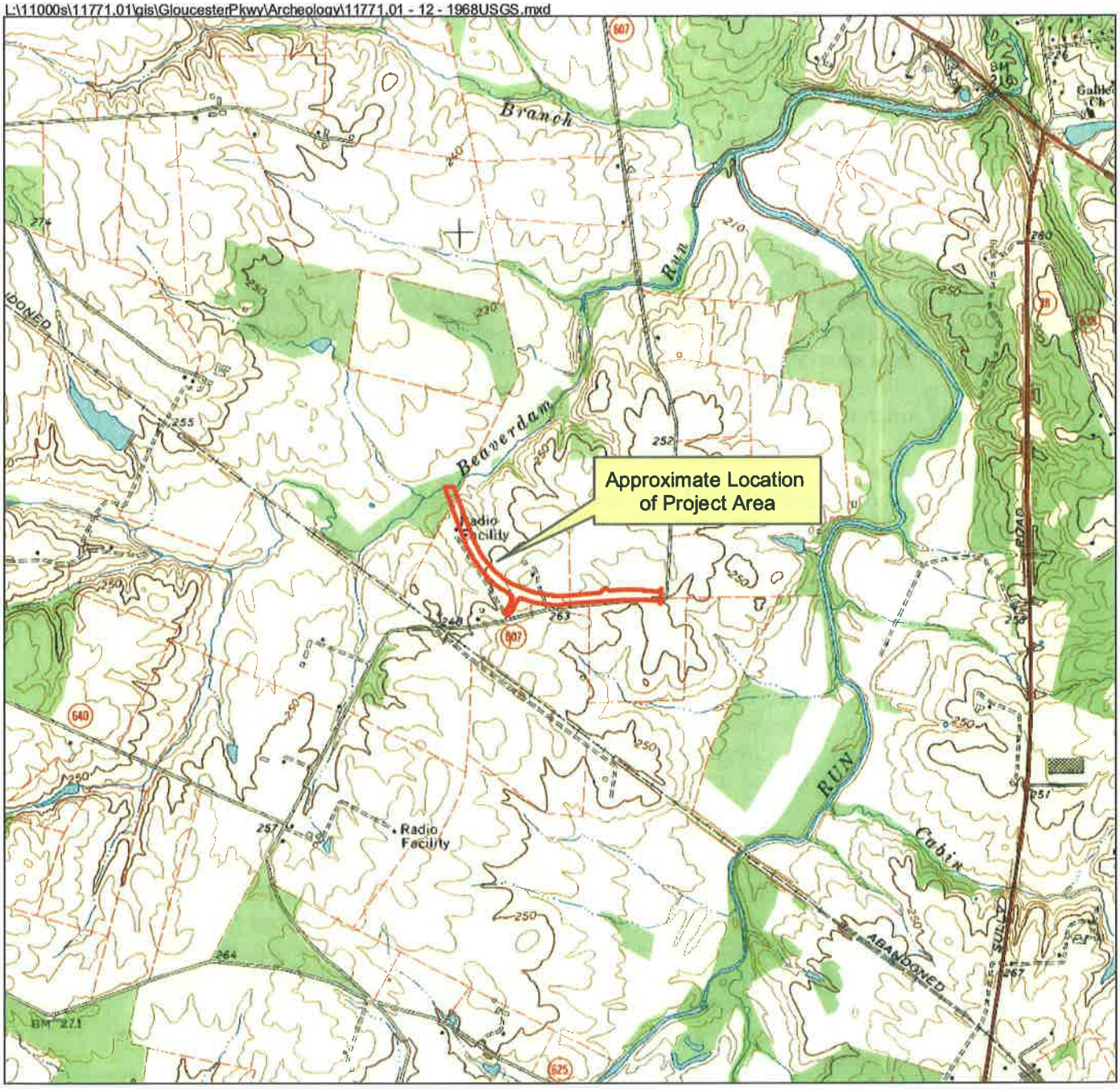
USGS Quad Map
Sterling, VA-MD 1952
Gloucester Parkway
WSSI #11771.01
Scale: 1" = 2000'

N
W
E
S

Thunderbird Archeology
A Division of Wetland Studies and Solutions, Inc.

Exhibit 8

L:\11000s\11771.01\gis\GloucesterPkwy\Archeology\11771.01 - 12 - 1968USGS.mxd



USGS Quad Map
Sterling, VA-MD 1968
Gloucester Parkway
WSSI #11771.01
Scale: 1" = 2000'

N
W E
S

Thunderbird Archeology
A Division of Wetland Studies and Solutions, Inc.

Exhibit 9

PREVIOUS ARCHEOLOGICAL RESEARCH

The following inventory of previously recorded historic sites within and near the project area was established by using VDHR's online Data Sharing System as well as examining cultural resource files and reports at the Thunderbird Archeology office in Gainesville, Virginia.

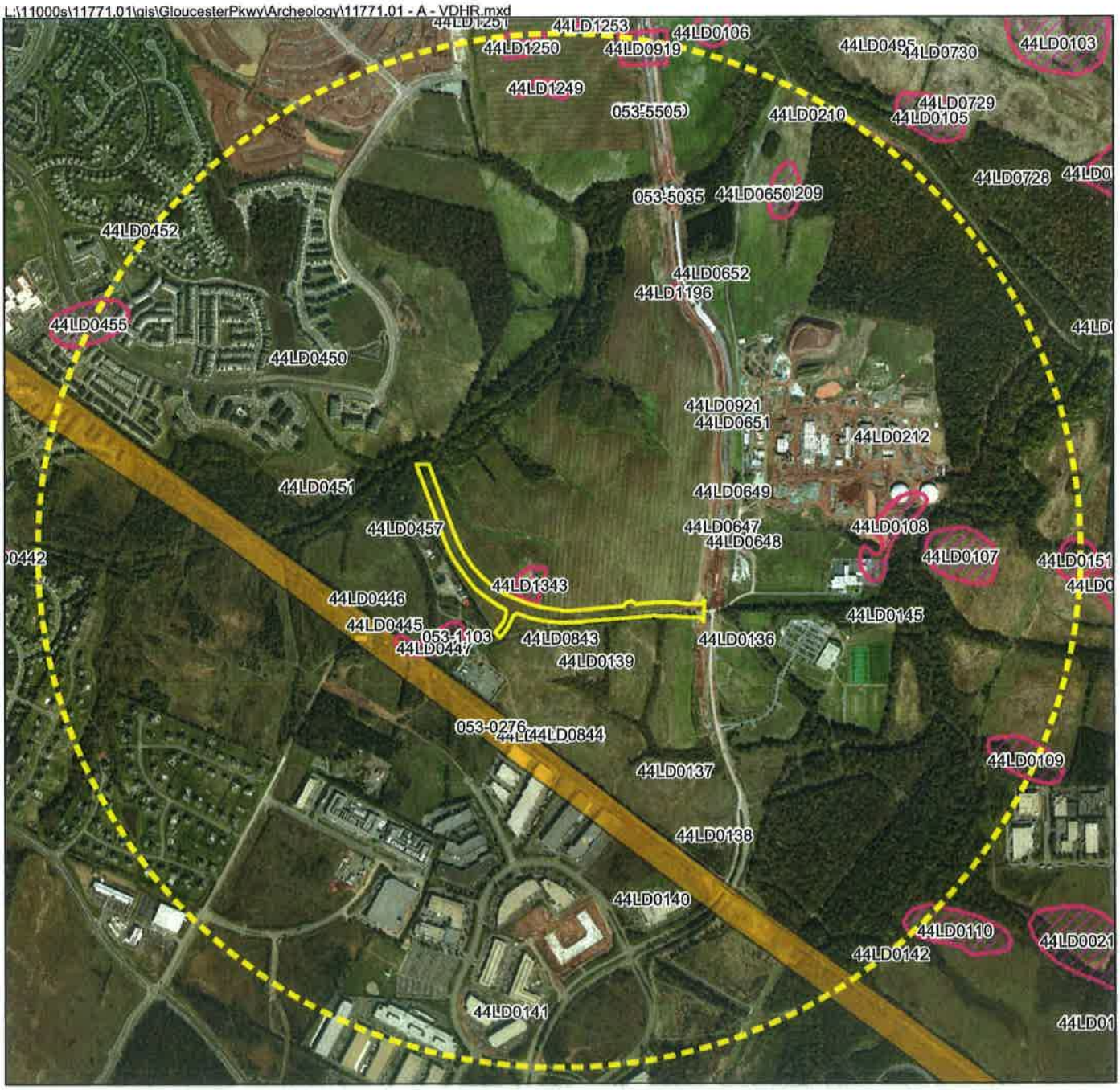
The following inventory of previously recorded historic sites within and near the project area was established by using VDHR's online Data Sharing Service as well as examining CRM reports at the Thunderbird Archeology offices in Gainesville, Virginia. The inventory includes sites within an approximate one-mile radius of the project area. No archeological sites or historic structures have been recorded on the Gloucester Parkway property. Within a one-mile radius of the project area, 54 archeological sites and six historic structures have been recorded (Exhibit 10).

Prehistoric sites

Thirty-eight of the archeological sites recorded in the vicinity are prehistoric or possess prehistoric components. The following 17 sites were recorded as a result of surface collection surveys conducted by William F. Rust II between 1979 and 1981 on the property of the Virginia Beef Corporation I. These sites were all located in the vicinity of Broad Run, east and south of the project area. No temporally diagnostic artifacts were recovered from sites 44LD0105, 44LD0106, 44LD0136, 44LD0140, 44LD0145 and 44LD0212. Sites 44LD0137, 44LD0138, 44LD0139, 44LD0148, 44LD0209and 44LD0210 were all identified as possible Late Archaic sites on the basis of recovered projectile points. Nineteenth century ceramics and brick fragments were also recovered from site 44LD0138. A large quantity of 19th and early 20th century ceramics was also recovered from the ground surface of 44LD0140 in the vicinity of an undated barn and house.

The recovery of triangular projectile points from sites 44LD0104, 44LD0141 and 44LD0151 led to their identification as Woodland period sites. Sites 44LD0103, 44LD0107, 44LD108 were identified as having both Archaic and Woodland components. Additional testing at site 44LD107 in 2001 by Thunderbird Archeological Associates further distinguished Early and Late Woodland components. Two quartz projectile points resembling diagnostic artifacts dating to the Early Woodland period reported for Selden Island were recovered from the ground surface at 44LD0141, along with triangular quartz and rhyolite points that indicate a Late Woodland component.

A 1983 Phase I survey by the Potomac River Archeological Survey identified site 44LD0299 near Horsepen Creek; recovery of a Holmes point fragment indicated this dated to the Archaic time period.



VDHR Architectural and Archeological Sites Map
2005 Natural Color Imagery
Gloucester Parkway
WSSI #11771.01
Scale: 1" = 1500'

N
W E
S

1 mile Buffer of Project Area
Project Boundary
VDHR Architectural Site
VDHR Archeological Site

Photo Source: Fall 2005 Aerials Express natural color imagery

Thunderbird Archeology
A Division of Wetland Studies and Solutions, Inc.

Exhibit 10

A 1989 Phase I survey by Espey, Huston & Associates, Inc., identified four prehistoric sites of undetermined time period and one Archaic site. Only temporally non-diagnostic artifacts were recovered from sites 44LD0445, 44LD0446 and 44LD0457 (southwest of the project area) and site 44LD0450 (west of the project area). Site 44LD0451, also southwest of the project area, contained Archaic period artifacts as well as mid to late 19th century glass and ceramics.

Site 44LD0495 was identified along the floodplain of Broad Run northeast of the project area as a result of a 1991 survey by WAPORA, Inc. Recovery of a possible Holmes projectile point indicated that this may be an Archaic site. This was located near sites 44LD0103-0105.

A Phase I survey of the Loudoun County Sanitation Authority property, across Route 607 from the project area, by Archaeological and Cultural Solutions, Inc. in 2000 identified sites 44LD0650 and 44LD0652. Both sites were adjacent to Broad Run and included Archaic projectile point types.

The A.S. Ray Property on the east bank of Broad Run was surveyed by Thunderbird Archeological Associates in 2001. Artifacts recovered from three sites on this property, 44LD0727, 44LD0728 and 44LD0730, were temporally non-diagnostic and occurred in low densities. All three sites are believed to represent ephemeral prehistoric occupations. A 2003 Phase I survey of Route 607 by the William and Mary Center for Archaeology identified site 44LD0921 east of the project area. A low density surface scatter, this site probably represents an ephemeral use of the area. Additional investigations conducted by Thunderbird Archeology in 2005 discovered an undated prehistoric component for 44LD0920.

A Phase I archeological survey conducted on the 300 acre One Loudoun Center property located just north of the project area identified seven prehistoric sites. 44LD1249 was interpreted as a temporary campsite that dates from possibly the terminal Late Archaic time period. 44LD1254 was considered a short term campsite that was occupied during an unknown prehistoric time period. Historical period components were also identified for the preceding sites and are discussed below. 44LD1250 was interpreted as a temporary camp site that was utilized from the Middle to Late Archaic time periods. 44LD1251 was interpreted as a campsite that was occupied during the Middle Archaic time period. 44LD1252 and 44LD1256 represent prehistoric lithic scatters without diagnostic artifacts. 44LD1253 was interpreted as a transient camp that was utilized during the Middle Archaic time period. These sites were primarily identified from surface collections and none were determined to be potentially eligible for inclusion on the National Register of Historic Places. The work was carried out by Thunderbird Archeology in 2004 and 2005.

Historic sites

Seventeen of the archeological sites recorded within a one-mile radius of the Gloucester Parkway property are historic period sites or sites with a historic period component.

Sites 44LD447, 44LD452 and 44LD455 were all recorded during a Phase I survey by Espey, Huston & Associates in 1989. Site 44LD447 / VDHR 053-1103, located along Smith Switch Road southwest of the project area, consisted of a silo, a collapsed gambrel-roofed concrete block dairy building, and the remains of a dwelling and an unidentified outbuilding. The buildings are believed to date to the 1930s. Site 44LD452, on a knoll near an intermittent drainage to Beaverdam Run, consists of a standing two-story frame dwelling, three outbuildings and surface artifacts. The site probably dates from the late 19th century to the 20th century. Site 44LD455, located on a low ridge west of the project area, is described as a probable farmstead of undetermined period. Structural remains present at the time the site was recorded included concrete slabs from razed outbuildings.

Sites 44LD647, 44LD648, 44LD649 and 44LD651 were all identified during a Phase I survey of the Loudoun County Sanitation Authority property in 2000. This property is across Route 607, immediately east of the project area. The survey was conducted by Archaeological and Cultural Solutions, Inc. Sites 44LD648, 44LD649 and 44LD651 were all identified as farmsteads from the first half of the 19th century, and site 44LD647 was identified as a farmstead from the second half of the 19th century.

Site 44LD729, a light scatter of ceramics, glass, nails and other artifacts, was identified during a 2001 Phase I survey of the Ray Property by Thunderbird Archeological Associates. It appears to be a domestic site dating to the late 18th century. A 2002 survey of the Beau Meade Corporate Park Property, also conducted by Thunderbird Archeological Associates, identified three historic period sites. Site 44LD843 is interpreted as a possible dwelling or outbuilding dating to the first half of the 19th century. Site 44LD844 is a possible domestic site dating from the early 19th into the 20th century. Site 44LD845 is a late 19th-20th trash scatter probably associated with 44LD844.

The William and Mary Center for Archaeological Research conducted a Phase I survey of Route 607, the Loudoun County Parkway corridor, in 2003. Two historic period sites, 44LD919 and 44LD920, were identified. Site 44LD919 consisted of two razed structures, two sheds, a well and silos located on both sides of Route 607 north of the project area. The site appeared to date from the second half of the 19th century through the 20th century. Site 44LD920 consisted of an abandoned house of cinderblock construction and a scatter of 20th century artifacts. Additional investigations conducted by Thunderbird Archeology during a survey of the One Loudoun Center property refined the site boundaries westward and included a prehistoric component in the site definition. The historic component contained artifacts dating from the 19th and 20th centuries. The prehistoric component represents occasional use of the area by prehistoric populations. Neither component was considered to be eligible for listing on the National Register of Historic Places.

44LD0990, also recorded as VDHR 053-5241, located northwest of project area, was identified in 2003 during a Phase I survey of the One Loudoun Center Property conducted by Archeological Testing and Consulting. This site is a farmstead that includes a circa 1890 two-story Georgian Revival dwelling, a block livestock barn, a block

feeding shed, two tile silos, a brick milking barn, two block utility sheds, a frame hay shed and a metal work shed. All of the outbuildings appear to date to the mid-20th century.

A Phase I archeological survey conducted by Thunderbird Archeology on the 300 acre One Loudoun Center property in 2004 and 2005 discovered three historical period sites. Two of these sites, 44LD1249 and 44LD1254, also featured prehistoric components and were discussed in the preceding section. The historic period components for these sites were considered to represent field scatter or secondarily deposited refuse. A survey of the Campus at Ashburn property immediately to the north of the project area discovered site 44LD1343, a multi-component site with elements of a unknown prehistoric site and a 20th century trash scatter.

Historic structures

In addition to the structures discussed above under site 44LD0990/VDHR 053-5241 and site 44LD0447/VDHR 053-1103, four other structures have been recorded in the vicinity of the project area.

At the northeast corner of the project area, the 66 foot concrete slab bridge spanning Beaverdam Run (VDHR 053-5035) is believed to have been constructed circa 1914. Thebridge was recorded in 1995.

Approximately one-half mile south of the project area is the route of the Alexandria, Loudoun, and Hampshire Railroad (VDHR 053-0276), founded in 1853. Now used as a trail and named the Washington & Old Dominion Railroad Regional Park, this historic transportation artery features the original railway alignment as well as original bridges, culverts and depots along its length. The W&OD Railroad has been found eligible for inclusion on the National Register of Historic Places.

Less than one-half mile north of the project area, the concrete bridge spanning Russell Branch (VDHR 053-0893) has also been recorded. This bridge is also believed to date to the early 20th century and appears to be a Luten bridge. Many concrete bridges were built by the Luten Bridge Company in early 20th century Loudoun County. A historic house at 20759 Loudoun County Parkway has been recorded as 053-5505. This dilapidated one-story frame house, built circa 1945, features a linear floor plan with a shed addition on its south elevation. The block house rests on a cinder block foundation and contains one interior cinder block chimney. There are no outbuildings associated with the property.

RESEARCH EXPECTATIONS

Due to the high number of archeological sites found in the region as well as the location of historic dwellings in the vicinity of the project area, the Gloucester Parkway property has a moderate to high probability of containing archeological sites. In addition, a multi-component site was found directly adjacent to the property, and it is probable that cultural resources related to this site may be recovered.

FIELD AND LABORATORY METHODS

Fieldwork

The Phase I field methodology included both the use of surface reconnaissance and shovel testing to locate and define boundaries of archeological sites. The surface reconnaissance consisted of walking over the area and examining all exposed areas for the presence of artifacts. Exposed areas included cut banks, tree falls, machinery cuts, soils exposed by erosion, etc. The surface reconnaissance was also used to examine the topography of specific areas in order to determine the probability that they contain archeological sites. All high probability areas--areas that were well drained and possessed low relief--were tested at 50 foot (15 meter) intervals. High probability areas also included historic structure areas identified through surface reconnaissance or through archival review of historic maps. Additional shovel tests were excavated at 25 foot (7.6 meter) intervals in a cruciform pattern around the positive shovel tests as necessary to define site boundaries and to delineate artifact concentrations. In general, the low probability areas were those that were sloping, poorly drained or that had been disturbed.

A portion of the project area is located within the floodplain that surrounds Beaverdam Run along the northern boundary of the property. This floodplain was walked over, examined, and photographed.

Shovel test pits measured at least 12 inches (30 cm) in diameter. Vertical excavation was by natural soil levels; excavation stopped when gleyed soils, gravel, water, or well developed B horizons too old for human occupation were reached. Soil horizons observed at the site were classified according to standard pedological designations. All soil was screened through 1/4-inch mesh hardware cloth screens. Soil profiles were made of representative units, with soil descriptions noted in standard soil terminology (A, Ap, B, C, etc.). Soil colors were described using the Munsell Soil Color Chart designations. Artifacts were bagged and labeled by unit number and by soil horizon.

Laboratory

All artifacts were cleaned, inventoried, and curated. Historic artifacts were separated into four basic categories: glass, metal, ceramics, and miscellaneous. The ceramics were identified as to ware type, method of decoration, and separated into established types, following South (1977), Miller (1992) and Magid (1990). All glass was examined for color, method of manufacture, function, etc., and dated primarily on the basis of method of manufacture when the method could be determined (Hurst 1990). Metal and miscellaneous artifacts were generally described; the determination of a beginning date is sometimes possible, as in the case of nails.

The prehistoric artifacts were classified by cultural historical and functional types and lithic material. In addition, the debitage was studied for the presence of striking

platforms and cortex, wholeness, quantity of flaking scars, signs of thermal alteration, size, and presence or absence of use. Chunks are fragments of lithic debitage which, although they appear to be culturally modified, do not exhibit clear flake or core morphology.

RESULTS OF FIELD INVESTIGATIONS

The Gloucester Parkway project area is comprised of a linear corridor following the proposed location of the Gloucester Parkway from the intersection of the Loudoun County Parkway and Smith Switch Road to Beaverdam Run. The topography within the project area gradually slopes down to Beaverdam Run along the northern boundary. The majority of the project area is situated within a well-maintained sod field (Plates 1 and 2). Smith Switch Road crosses through the eastern portion of the project area, and a gravel access road for the sod farm cuts through the center of the project area (Plates 3 and 4). A small portion of the project area is located within the floodplain surrounding Beaverdam Run. The vegetation within the floodplain consists of a mixed hardwood forest of green ash, persimmons, and oak trees (Plates 5 and 6).

Areas of soil disturbance were noted along the eastern boundary of the project area close to the intersection of Smith Switch Road and the Loudoun County Parkway (Plates 7, 8,and 9). These areas of disturbance extended to both sides of Smith Switch Road, and are associated with the construction of artificial drainages for the Loudoun County Parkway. The disturbed portions of the project area were noted but not tested.

One hundred and thirty nine shovel test pits were excavated at 25 and 50 foot (7.6 and 15.2 meter) intervals (Exhibit 11). The soil profiles in all of the shovel test pits within the Gloucester Parkway project area were comprised of a very compact plow zone over subsoil. A representative profile from the project area is shown below and in Exhibit 12.

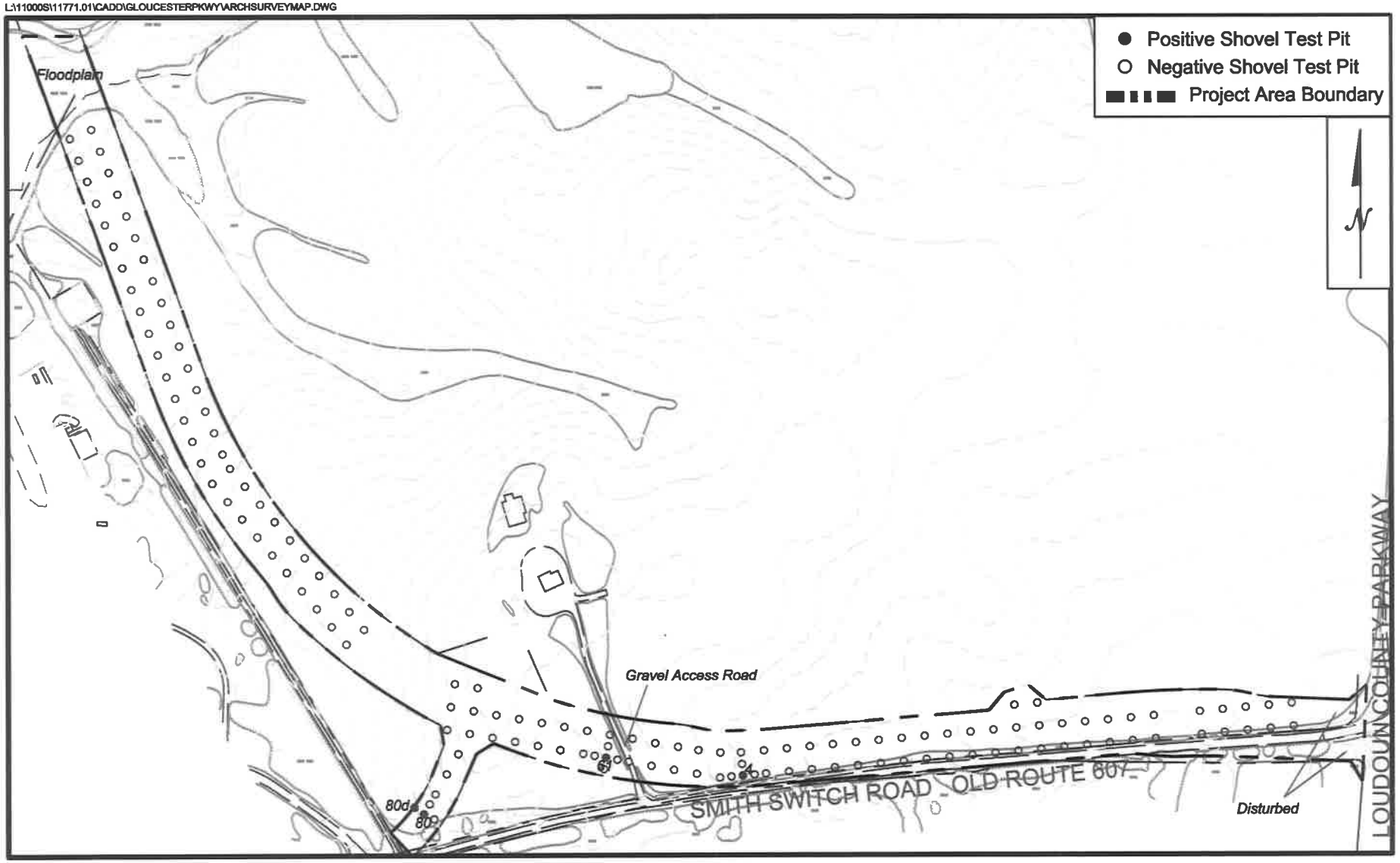
STP 55

Ao/Ap horizon: 0-8.4 inches (0-21.3 centimeters) below ground surface – [7.5YR 4/4] brown silt loam

B horizon: 8.4-12 inches (21.3-30.5 centimeters) below ground surface – [7.5YR 5/4] brown silt clay loam with 10% saprolite.

STP 4 is located to the east of the gravel access road that divides the project area in two. This shovel test pit contained one unidentified nail fragment. Additional shovel test pits were excavated around STP 4 at 25 foot intervals. These yielded no additional archeological remains. STP 61 yielded one light aqua glass sherd and one shell fragment. Reduced interval testing around the STP also did not yield any additional cultural materials. STP 80 yielded one light cobalt blue bottle sherd. Reduced interval testing yielded one manganese cylindrical bottle sherd from STP 80d. All of these artifacts are considered to be isolated finds and do not constitute archeological sites. No further archeological work is recommended for any of these locations.

L:\11000S\11771.01\CADD\GLOUCESTERPKWY\ARCHSURVEYMAP.DWG

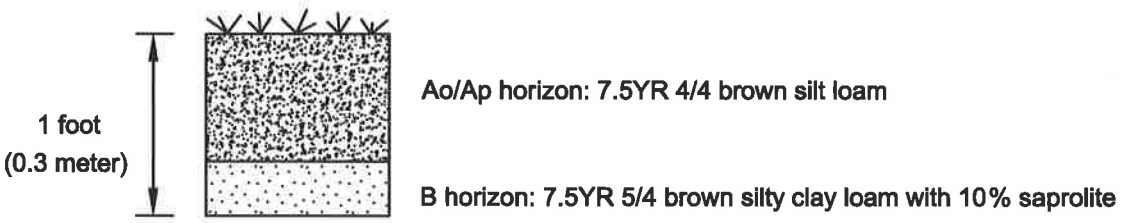


Project Area Map Showing Shovel Test Locations
Gloucester Parkway - WSSI #11771.01
Scale: 1" = 300'

Thunderbird Archeology
A division of Wetland Studies and Solutions, Inc.

Exhibit 11

L:\110008\11771.01\CADD\GLOUCESTERPKWY\ARCHPROFILE.DWG



Representative Soil Profile
Glouchester Property - WSSI #1771.01
Scale: 1" =1'

SUMMARY AND RECOMMENDATIONS

A Phase I archeological investigation was conducted of the 11.35 acre Gloucester Parkway property. No archeological sites were found during this investigation of the project area, and no further archeological work is recommended for the project area.

A floodplain surrounds Beaverdam Run along the northern portion of the project area. If this floodplain will be impacted by future planned development, we recommend that a Phase I investigation be conducted in the impact area before any development occurs.

REFERENCES CITED

Bailey, C.M.
1999 "Physiographic Map of Virginia," *The Geology of Virginia.* Chad Roberts and C.M. Bailey, College of William and Mary Department of Geology. http://www.wm.edu/geology/virginia/phys_regions.html (29 October 2004)

Boatner, Mark M.
1991 *The Civil War Dictionary.* Vintage Books, New York, New York.

Bowman, John S.
1985 *The Civil War Almanac.* World Almanac Publications, New York, New York.

Bradshaw, Herbert Clarence
1955 *History Of Prince Edward County, Virginia From its Earliest Settlements through its Establishment in 1754 To its Bicentennial Year.* The Dietz Press, Richmond, Virginia.

Brown, Lois
1979 *Fluted Points in Maryland.* Unpublished, on file at the Maryland Geological Survey, Division of Archeology.

Carbone, Victor A.
1976 *Environment and Prehistory in the Shenandoah Valley.* Unpublished Ph.D. Dissertation, Catholic University of America, Washington, D.C.

Church, Randolph W. and George H. Reese
1965 *A Hornbook of Virginia History.* The Virginia State Library. Richmond, Virginia.

Commonwealth of Virginia
1873 *Acts and Joint Resolutions Passed by the General Assembly of the State of Virginia at Its Session of 1872-'73.* R.F. Walker, Richmond, Virginia.
1877 *Acts and Joint Resolutions Passed by the General Assembly of the State of Virginia at Its Session of 1876-77.* R. F. Walker, Richmond, Virginia.
1884 *Acts and Joint Resolutions Passed by the General Assembly of the State of Virginia at Its Session of 1883-84.* R.U. Derr, Richmond, Virginia.
1886 *Acts and Joint Resolutions Passed by the General Assembly of the State of Virginia at Its Session of 1885-'86.* A. R. Micou, Richmond, Virginia.
1887 *Acts and Joint Resolutions Passed by the General Assembly of the State of Virginia, During the Extra Session of 1887.* A.R. Micou, Richmond, Virginia.

Darmody, R.G. and J.E. Foss
1978 *Tidal Marsh Soils of Maryland.* Maryland Agricultural Experimental Station Publication 930:1-69.

Deck, Patrick A. and Henry Heaton
1926 *An Economic and Social Survey of Loudoun County.* In University of Virginia Record Extension Series, Vol. X. University of Virginia, Charlottesville, Virginia.

Dent, Richard J.
1995 *Chesapeake Prehistory: Old Traditions, New Directions.* Plenum Press, New York.

Dickenson, Russell E.
1983 Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines. *Federal Register* 48 (190): 44716-44742.

Edwards III, Conley L., Gwendolyn D. Clark and Jennifer D. McDaid
1994 *A Guide To Business Records In The Virginia State Library And Archives.* Virginia State Library and Archives, Richmond, Virginia.

Evans, James D.
1877/78 *Loudoun County a Hundred years Ago* in William and Mary Quarterly, S1, 12:231-236).

Fenneman, Nevin M.
1938 *Physiography of Eastern United States.* McGraw-Hill Book Company, Inc. New York and London.

Fiedel, Stuart J.
1999 *Connecting Late Prehistoric Ceramic Lineages with Early Historic Ethnic-Linguistic Groups: Prospects and Problem*s. Paper presented at the 1999 Middle Atlantic Archeological Conference, Harrisburg, Pennsylvania.

Gallagher, Gary W. [editor]
1989 *Fighting for the Confederacy. The Personal Recollections of General Edward Porter Alexander.* The University Of North Carolina Press, Chapel Hill, North Carolina.

Gardner, William M.
1982 Early and Middle Woodland in the Middle Atlantic: An Overview. In *Practicing Environmental Archaeology: Methods and Interpretations*, pp. 53-86, Roger W. Moeller, editor. Occasional Paper Number 3, American Indian Archaeological Institute, Washington, Connecticut.
1985 *Prehistoric Site Distribution in the Greater Washington, D.C. Area.* Paper presented at the Annual Meeting of the American Anthropological Society, Washington, D.C.

1987 Comparison of Ridge and Valley, Blue Ridge, Piedmont, and Coastal Plain Archaic Period Site Distribution: An Idealized Transect. In *Journal of Middle Atlantic Archeology,* Vol. 3, pp. 49-80, Roger W. Moeller, editor. Archeological Services, Bethlehem, Connecticut.

1989 An Examination of Cultural Change in the Late Pleistocene and Early Holocene (circa 9200-6800 B.C.) in *Paleoindian Research in Virginia: A Synthesis*, edited by J. Mark Wittkofski and T.R. Rhinehart, pp.5-51. Special Publication No. 19 of the Archeological Society of Virginia. The Dietz Press, Richmond, Virginia.

1991 *Notes for the Territory Presentation.* Paper presented at the 1991 Middle Atlantic Archeological Conference, Ocean City, Maryland.

Gardner, William M. and Charles W. McNett, Jr.

1971 Early Pottery in the Potomac. *Proceedings of the Second Middle Atlantic Archaeological Conference.* Washington, D.C.

Gardner, William M. and Lauralee Rappleye

1979 A *Cultural Resources Reconnaissance and Impact Area Assessment of the Great Dismal Swamp Wildlife Refuge, Chesapeake and Nansemond Counties, Virginia.* Report prepared for the U.S. Department of the Interior, Interagency Archeological Services, Atlanta, Georgia.

Gardner, William M. and Joan M. Walker

1993 *A Phase I Cultural Resources Reconnaissance of the Proposed Mitchell Substation and Mitchell Transmission Line in Culpeper County, Virginia.* Report prepared for Rappahannock Electric Cooperative, Fredericksburg, by the Thunderbird Archeological Associates, Inc., Woodstock, Virginia.

Geddes, Joan

1967 *Fairfax County. Historical Highlights From 1607.* Delinger's, Fairfax, Virginia.

Goode, Charles E.

2002 *The Rise of Ceramic Production in the Potomac Piedmont of Virginia: An Analysis of Steatite Vessel Fragments and Early Woodland Ceramics from Sites 44LD619, 44LD617, 44LD6, 44LD659 and 44LD672.* Unpublished M.A. Thesis, Department of Anthropology, Catholic University of America, Washington, D.C.

Greene, Evarts B.

1932 *American Population Before The Federal Census Of 1790.* Columbia University Press, New York, New York.

Gutheim, Frederick

1986 *The Potomac.* John Hopkins University Press, Baltimore, Maryland and London, England.

Hantman, Jeffrey L. and Michael J. Klein
1992 Middle and Late Woodland Archaeology in Piedmont Virginia. In *Middle and Late Woodland Research in Virginia: A Synthesis*, pp. 137-164, Theodore R. Reinhart and Mary Ellen N. Hodges, editors. Archeological Society of Virginia Special Publication No. 29. The Dietz Press, Richmond, Virginia.

Harrison, Fairfax
1987 *Landmarks of Old Prince William. Volumes I and II.* Gateway Press, Baltimore, Maryland.

Head, James W.
1908 *History and Comprehensive Description of Loudoun County, Virginia.* Park View Press (no location stated).

Hening, William Waller
1819 *The Statutes at Large; Being a Collection of All the Laws of Virginia, From the First Session of the Legislature, In the Year 1619. Volume V.* Franklin Press, Richmond, Virginia.
1819 *The Statutes at Large; Being a Collection of All the Laws of Virginia, From the First Session of the Legislature, In the Year 1619. Volume VII.* Franklin Press, Richmond, Virginia.
1820 *The Statutes at Large; Being a Collection of All the Laws of Virginia, From the First Session of the Legislature, In the Year 1619. Volume IV.* Franklin Press, Richmond, Virginia.
1822 *The Statutes at Large; Being a Collection of All the Laws of Virginia, From the First Session of the Legislature, In the Year 1619. Volume X.* George Cochran, Richmond, Virginia.
1823 *The Statutes at Large; Being a Collection of All the Laws of Virginia, From the First Session of the Legislature, In the Year 1619. Volume I.* R. & W. & G. Bartow, New York, New York.
1823 *The Statutes at Large; Being a Collection of All the Laws of Virginia, From the First Session of the Legislature, In the Year 1619. Volume II.* R. & W. G. Bartow, New York, New York.

Hiden, Martha W.
1980 *How Justice Grew. Virginia Counties: An Abstract of Their Formation.* The University Press of Virginia, Charlottesville, Virginia.

Hillsboro Bicentennial Committee
1976 *Hillsboro: Memories of a Mill Town.* Potomac Press, Leesburg, Virginia.

History Matters
2004 Loudoun County African American Historic Architectural Resources Survey. Prepared by History Matters, Washington, D.C. for the Loudoun County Board of Supervisors and the Black History Committee of the Friends of Thomas Balch Library, Leesburg, Virginia.

Hurst, Gwen J.
1990 *U.S. Bottle Chronology.* B.P. Bishop Museum, Honolulu, Hawaii.

Jirikowic, Christine
1999 *Keyser Ware Ceramics at the Hughes Site and in the Potomac Basin.* Paper presented at the Middle Atlantic Archeological Conference, Harrisburg, Pennsylvania.

Johnson, Michael
1983 The Evolution of the Bifurcate Hunting System in the Interior Piedmont of Fairfax County, Virginia. In *Piedmont Archaeology*, pp. 55-73, J. Mark Wittkofski and Lyle E. Browning, editors. Archeological Society of Virginia Special Publication No. 10. Richmond, Virginia.
1986 *Fairfax County Archeological Overview.* Heritage Resources Branch, Fairfax, Virginia.

Kavanaugh, Maureen
1983 Prehistoric Occupation of the Monocacy River Region, Maryland. In *Piedmont Archaeology*, pp. 40-54, J. Mark Wittkofski and Lyle E. Browning, editors. Archeological Society of Virginia, Special Publication 10, Richmond.

Kelso, William M.
1995 *Jamestown Rediscovery I: Search for 1607 James Fort.* Association for the Preservation Of Virginia Antiquities, Jamestown, Virginia

Kilmer, Kenton and Donald Sweig
1975 *The Fairfax Family in Fairfax County.* Fairfax County Office of Comprehensive Planning, Fairfax, Virginia.

Library of Virginia, The
1839-1857 Records of "Goose Creek and Little River Navigation", Accession Number 94. The Library of Virginia, Richmond, Virginia.

Little River Navigation Company
1832 *Survey of Goose Creek and Little River & Beaver Dam Branches thereof.* (Library of Virginia Map Collection 755.27 H9 [1832]).

Lutz, Francis Earle
1954 *Chesterfield. An Old Virginia County.* William Byrd Press, Richmond, Virginia.

MacIntyre, Carl Franklin
1978 Proprietary Land Grants in Eastern Loudoun County. In the May 19 *Loudoun Easterner.*

Magid, Barbara H., editor
1990 *Alexandria Archaeology Artifact Code Books.* Alexandria Archaeology Publications Number 11. Alexandria Archaeology Office of Historic Alexandria, City of Alexandria, Virginia.

Martin, Joseph
1836 *A New and Comprehensive Gazetteer of Virginia, and the District of Columbia: Containing a Copious Collection of Biographical, Statistical, Political, Commercial, Religious, Moral, and Miscellaneous Information, Collected and Compiled from the Most Respectable, and Chiefly from Original Sources.* Moseley & Tompkins, Charlottesville, Virginia.

Miller, George
1992 *Refinement of South's Types and Median Dates.* Manuscript at University of Delaware Center for Archeological Research, Newark.

Miller, Glenda F. and Joan M. Walker
n.d. *Competing Agendas: The Fur Trade and Native Americans.*

Montague, Ludwell Lee
1971 Richard Bland Lee of Sully in *Historical Society of Fairfax County, Virginia,* 11:117.

Nugent, Nell Marion
1983 *Cavaliers And Pioneers. Abstracts of Virginia Land Patents and Grants 1623-1666.* Virginia Book Company, Berryville, Virginia.

O'Dell, Jeffrey M.
1983 *Chesterfield County. Early Architecture and Historic Sites.* Chesterfield County, Virginia.

Palmer, William P. [editor]
1881 *Calendar Of Virginia State Papers And Other Manuscripts, From April 1, 1781, To December 31, 1781. Preserved In The Capitol At Richmond.* Sherwin McRae, Richmond, Virginia.

Poland, Charles P., Jr.
1976 *From Frontier to Suburbia.* Walsworth Publishing Company, Marceline, Missouri.

Potter, Stephen R.
1982 *An Analysis of Chicacoan Settlement Patterns.* PhD dissertation on file, Department of Anthropology, University of North Carolina, Chapel Hill.
1993 *Commoners, Tribute and Chiefs: The Development of Algonquian Culture in the Potomac Valley.* University Press of Virginia, Charlottesville.

Salmon, John S.
1996 *Board Of Public Works Inventory. Records In The Library Of Virginia.* The Library of Virginia, Richmond, Virginia.

Shelford, Victor E.
1963 *The Ecology of North America.* University of Illinois Press, Urbana.

South, Stanley
1977 *Method and Theory in Historical Archeology.* University of Illinois Press, Urbana.

Stevens, J. Sanderson
1989 *Environmental Site Predictors and Prehistoric Settlement Patterns in the Central Piedmont of Virginia.* Paper presented at the Middle Atlantic Archaeological Conference, Rehoboth Beach, Delaware.

Sweig, Donald M.
1995 *A Brief History Of Fairfax County.* Heritage Resources Branch, Office of Comprehensive Planning, Fairfax County, Virginia.

Trout, W. E. III
1967 "The Goose Creek and Little River Navigation. A canal project in Loudoun County took twenty years to complete, but it carried only one boat" in *Virginia Cavalcade*, Winter 1967:31-34).

Virginia Department of Historic Resources (VDHR)
2001 *Guidelines for Conducting Cultural Resource Surveys in Virginia. Additional Guidance for the Implementation of the Federal Standards Entitled Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines.* Virginia State Department of Historic Resources, Richmond, Virginia.

Walker, Joan M.
1981 *A Preliminary Report On the Prehistory of Prince William County, Virginia.* Report prepared for the County of Prince William by the Thunderbird Research Corporation, Woodstock, Virginia.

Walker, Joan M. and William M. Gardner
1989 *Phase I Archeological Survey , Telegraph Woods Sanitary Sewer Line, Fort Belvoir, Virginia.* Report prepared by Thunderbird Archeological Associates, Inc. for Paciulli, Simmons and Associates, Ltd., Fairfax, Virginia.

Waselkov, Gregory A.
1982 *Shellfish Gathering and Shell Midden Archaeology.* Ph.D. Dissertation, University of North Carolina, Chapel Hill.

Weiss-Bromberg, Francine
1987 *Site Distribution in the Coastal Plain and Fall Zone of the Potomac Valley from ca. 6500 B.C. to A.D. 1400.* Master's Thesis, Department of Anthropology, The Catholic University of America, Washington, D.C.

Woods, Edgar
1901 *Albemarle County In Virginia.* The Michie Company Printers, Charlottesville, Virginia.

Public Records Consulted

McDowell, General Irwin
1862 *Map of Northeastern Virginia And Vicinity Of Washington. Surveys For Military Defenses.* Topographical Engineers Office, Arlington, Virginia.

Post Office Department
1925 *Rural Delivery Routes. Loudoun County, Virginia.* U. S. Post Office, Washington, D. C.

Taylor, Yardley
1853 *Map of Loudoun County, Virginia.* Thomas Reynolds & Robert Persall Smith, Philadelphia, Pennsylvania.

United States Geological Survey
1908 *Seneca, VA-MD Quadrangle* (Topographic Map). 1:62,500.15 Minute Series U.S. Geological Survey, Washington, D.C.
1952 *Sterling, VA-MD Quadrangle* (Topographic Map). 1:24000. 7.5 Minute Series U.S. Geological Survey, Washington, D.C.
1968 *Sterling, VA-MD Quadrangle* (Topographic Map). 1:24,000 7.5 Minute Series U.S. Geological Survey, Washington, D.C.
1994 *Sterling, VA-MD Quadrangle* (Topographic Map). 1:24,000 7.5 Minute Series U.S. Geological Survey, Washington, D.C.

PLATES

PLATE 1
Overview of Sod Fields within the Project Area, View to the South

PLATE 2
Overview of Sod Fields within the Project Area, View to the East

PLATE 3
Smith Switch Road, View to the West

PLATE 4
Gravel Access Road to the Sod Farm, View to the North

PLATE 5
Overview of Forested Floodplain within the Project Area, View to the Northeast

PLATE 6
Overview of Beaverdam Run, View to the Northwest

PLATE 7
Area of Disturbance along the Eastern Boundary of the Project Area South of Smith Switch Road,
View to the Northwest

PLATE 8
Area of Disturbance along the Eastern Boundary of the Project Area South of Smith Switch Road, View to the East

PLATE 9
Area of Disturbance along the Eastern Boundary of the Project Area North of Smith Switch Road,
View to the North

APPENDIX
Artifact Inventory

GLOUCESTER PARKWAY PHASE I
ARTIFACT INVENTORY

STP 4, Ao/Ap

Metal

1 unidentified nail fragment

STP 61, Ao/Ap horizon

Glass

1 unidentified very pale aqua sherd, flat

Miscellaneous

1 shell fragment, 2.9 g

STP 80, Ao/Ap horizon

Glass

1 light cobalt cylindrical bottle sherd, possible chilled iron mold

STP 80d, Ao/Ap horizon

Glass

1 clear manganese cylindrical bottle sherd, stained (1880-1915)